

Contacts of E315 in dog POR

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Cutoff distance: 1.000

262	GLU ( 315 ) A	N	<>	265	ASP ( 318 ) A	CB	D=	4.44	(B-S)
262	GLU ( 315 ) A	N	<>	265	ASP ( 318 ) A	CG	D=	3.98	(B-S)
262	GLU ( 315 ) A	N	<>	265	ASP ( 318 ) A	OD2	D=	3.09	(B-S)
262	GLU ( 315 ) A	CA	<>	265	ASP ( 318 ) A	OD2	D=	4.17	(B-S)
262	GLU ( 315 ) A	C	<>	265	ASP ( 318 ) A	N	D=	4.27	(B-B)
262	GLU ( 315 ) A	C	<>	265	ASP ( 318 ) A	CB	D=	4.59	(B-S)
262	GLU ( 315 ) A	C	<>	265	ASP ( 318 ) A	CG	D=	4.54	(B-S)
262	GLU ( 315 ) A	O	<>	265	ASP ( 318 ) A	N	D=	3.18	(B-B)
262	GLU ( 315 ) A	O	<>	265	ASP ( 318 ) A	CA	D=	3.88	(B-B)
262	GLU ( 315 ) A	O	<>	265	ASP ( 318 ) A	CB	D=	3.41	(B-S)
262	GLU ( 315 ) A	O	<>	265	ASP ( 318 ) A	CG	D=	3.55	(B-S)
262	GLU ( 315 ) A	O	<>	265	ASP ( 318 ) A	OD2	D=	3.48	(B-S)
262	GLU ( 315 ) A	CG	<>	265	ASP ( 318 ) A	CG	D=	4.45	(S-S)
262	GLU ( 315 ) A	CG	<>	265	ASP ( 318 ) A	OD2	D=	4.02	(S-S)
262	GLU ( 315 ) A	N	<>	462	LYS ( 515 ) A	NZ	D=	4.22	(B-S)
262	GLU ( 315 ) A	CG	<>	462	LYS ( 515 ) A	NZ	D=	3.72	(S-S)
262	GLU ( 315 ) A	CD	<>	462	LYS ( 515 ) A	CE	D=	4.48	(S-S)
262	GLU ( 315 ) A	CD	<>	462	LYS ( 515 ) A	NZ	D=	3.80	(S-S)
262	GLU ( 315 ) A	OE2	<>	462	LYS ( 515 ) A	CE	D=	3.54	(S-S)
262	GLU ( 315 ) A	OE2	<>	462	LYS ( 515 ) A	NZ	D=	3.01	(S-S)
262	GLU ( 315 ) A	CG	<>	466	ARG ( 519 ) A	CB	D=	3.96	(S-S)
262	GLU ( 315 ) A	CD	<>	466	ARG ( 519 ) A	CB	D=	4.01	(S-S)
262	GLU ( 315 ) A	CD	<>	466	ARG ( 519 ) A	CG	D=	4.44	(S-S)
262	GLU ( 315 ) A	CD	<>	466	ARG ( 519 ) A	CD	D=	4.32	(S-S)
262	GLU ( 315 ) A	OE2	<>	466	ARG ( 519 ) A	CB	D=	4.16	(S-S)
262	GLU ( 315 ) A	OE2	<>	466	ARG ( 519 ) A	CD	D=	3.77	(S-S)
262	GLU ( 315 ) A	CA	<>	493	GLU ( 546 ) A	OE2	D=	4.07	(B-S)
262	GLU ( 315 ) A	CB	<>	493	GLU ( 546 ) A	OE2	D=	3.85	(S-S)

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Cutoff distance: 2.000

262	GLU ( 315 ) A	N	<>	260	ARG ( 313 ) A	C	D=	4.78	(B-B)
262	GLU ( 315 ) A	N	<>	260	ARG ( 313 ) A	O	D=	5.08	(B-B)
262	GLU ( 315 ) A	N	<>	265	ASP ( 318 ) A	N	D=	5.30	(B-B)
262	GLU ( 315 ) A	N	<>	265	ASP ( 318 ) A	CB	D=	4.44	(B-S)
262	GLU ( 315 ) A	N	<>	265	ASP ( 318 ) A	CG	D=	3.98	(B-S)
262	GLU ( 315 ) A	N	<>	265	ASP ( 318 ) A	OD1	D=	4.92	(B-S)
262	GLU ( 315 ) A	N	<>	265	ASP ( 318 ) A	OD2	D=	3.09	(B-S)
262	GLU ( 315 ) A	CA	<>	265	ASP ( 318 ) A	N	D=	5.44	(B-B)
262	GLU ( 315 ) A	CA	<>	265	ASP ( 318 ) A	CB	D=	5.23	(B-S)
262	GLU ( 315 ) A	CA	<>	265	ASP ( 318 ) A	CG	D=	4.84	(B-S)
262	GLU ( 315 ) A	CA	<>	265	ASP ( 318 ) A	OD2	D=	4.17	(B-S)
262	GLU ( 315 ) A	C	<>	265	ASP ( 318 ) A	N	D=	4.27	(B-B)
262	GLU ( 315 ) A	C	<>	265	ASP ( 318 ) A	CA	D=	5.08	(B-B)
262	GLU ( 315 ) A	C	<>	265	ASP ( 318 ) A	CB	D=	4.59	(B-S)
262	GLU ( 315 ) A	C	<>	265	ASP ( 318 ) A	CG	D=	4.54	(B-S)
262	GLU ( 315 ) A	C	<>	265	ASP ( 318 ) A	OD2	D=	4.25	(B-S)
262	GLU ( 315 ) A	O	<>	265	ASP ( 318 ) A	N	D=	3.18	(B-B)
262	GLU ( 315 ) A	O	<>	265	ASP ( 318 ) A	CA	D=	3.88	(B-B)

262	GLU	( 315 )	A	O	<>	265	ASP	( 318 )	A	C	D=	4.85	(B-B)
262	GLU	( 315 )	A	O	<>	265	ASP	( 318 )	A	CB	D=	3.41	(B-S)
262	GLU	( 315 )	A	O	<>	265	ASP	( 318 )	A	CG	D=	3.55	(B-S)
262	GLU	( 315 )	A	O	<>	265	ASP	( 318 )	A	OD1	D=	4.41	(B-S)
262	GLU	( 315 )	A	O	<>	265	ASP	( 318 )	A	OD2	D=	3.48	(B-S)
262	GLU	( 315 )	A	CB	<>	265	ASP	( 318 )	A	CG	D=	5.22	(S-S)
262	GLU	( 315 )	A	CB	<>	265	ASP	( 318 )	A	OD2	D=	4.57	(S-S)
262	GLU	( 315 )	A	CG	<>	265	ASP	( 318 )	A	N	D=	5.32	(S-B)
262	GLU	( 315 )	A	CG	<>	265	ASP	( 318 )	A	CB	D=	5.38	(S-S)
262	GLU	( 315 )	A	CG	<>	265	ASP	( 318 )	A	CG	D=	4.45	(S-S)
262	GLU	( 315 )	A	CG	<>	265	ASP	( 318 )	A	OD1	D=	4.67	(S-S)
262	GLU	( 315 )	A	CG	<>	265	ASP	( 318 )	A	OD2	D=	4.02	(S-S)
262	GLU	( 315 )	A	CD	<>	265	ASP	( 318 )	A	CG	D=	5.47	(S-S)
262	GLU	( 315 )	A	CD	<>	265	ASP	( 318 )	A	OD2	D=	5.03	(S-S)
262	GLU	( 315 )	A	N	<>	462	LYS	( 515 )	A	NZ	D=	4.22	(B-S)
262	GLU	( 315 )	A	CA	<>	462	LYS	( 515 )	A	NZ	D=	5.00	(B-S)
262	GLU	( 315 )	A	CB	<>	462	LYS	( 515 )	A	NZ	D=	4.53	(S-S)
262	GLU	( 315 )	A	CG	<>	462	LYS	( 515 )	A	CE	D=	4.60	(S-S)
262	GLU	( 315 )	A	CG	<>	462	LYS	( 515 )	A	NZ	D=	3.72	(S-S)
262	GLU	( 315 )	A	CD	<>	462	LYS	( 515 )	A	CE	D=	4.48	(S-S)
262	GLU	( 315 )	A	CD	<>	462	LYS	( 515 )	A	NZ	D=	3.80	(S-S)
262	GLU	( 315 )	A	OE1	<>	462	LYS	( 515 )	A	NZ	D=	5.01	(S-S)
262	GLU	( 315 )	A	OE2	<>	462	LYS	( 515 )	A	CD	D=	5.02	(S-S)
262	GLU	( 315 )	A	OE2	<>	462	LYS	( 515 )	A	CE	D=	3.54	(S-S)
262	GLU	( 315 )	A	OE2	<>	462	LYS	( 515 )	A	NZ	D=	3.01	(S-S)
262	GLU	( 315 )	A	CB	<>	466	ARG	( 519 )	A	CB	D=	5.42	(S-S)
262	GLU	( 315 )	A	CG	<>	466	ARG	( 519 )	A	CA	D=	4.69	(S-B)
262	GLU	( 315 )	A	CG	<>	466	ARG	( 519 )	A	C	D=	5.03	(S-B)
262	GLU	( 315 )	A	CG	<>	466	ARG	( 519 )	A	CB	D=	3.96	(S-S)
262	GLU	( 315 )	A	CG	<>	466	ARG	( 519 )	A	CG	D=	4.87	(S-S)
262	GLU	( 315 )	A	CG	<>	466	ARG	( 519 )	A	CD	D=	4.93	(S-S)
262	GLU	( 315 )	A	CD	<>	466	ARG	( 519 )	A	CA	D=	4.95	(S-B)
262	GLU	( 315 )	A	CD	<>	466	ARG	( 519 )	A	C	D=	5.04	(S-B)
262	GLU	( 315 )	A	CD	<>	466	ARG	( 519 )	A	CB	D=	4.01	(S-S)
262	GLU	( 315 )	A	CD	<>	466	ARG	( 519 )	A	CG	D=	4.44	(S-S)
262	GLU	( 315 )	A	CD	<>	466	ARG	( 519 )	A	CD	D=	4.32	(S-S)
262	GLU	( 315 )	A	CD	<>	466	ARG	( 519 )	A	NE	D=	5.22	(S-S)
262	GLU	( 315 )	A	OE1	<>	466	ARG	( 519 )	A	C	D=	4.97	(S-B)
262	GLU	( 315 )	A	OE1	<>	466	ARG	( 519 )	A	CB	D=	4.53	(S-S)
262	GLU	( 315 )	A	OE1	<>	466	ARG	( 519 )	A	CG	D=	4.81	(S-S)
262	GLU	( 315 )	A	OE1	<>	466	ARG	( 519 )	A	CD	D=	4.88	(S-S)
262	GLU	( 315 )	A	OE2	<>	466	ARG	( 519 )	A	CB	D=	4.16	(S-S)
262	GLU	( 315 )	A	OE2	<>	466	ARG	( 519 )	A	CG	D=	4.31	(S-S)
262	GLU	( 315 )	A	OE2	<>	466	ARG	( 519 )	A	CD	D=	3.77	(S-S)
262	GLU	( 315 )	A	OE2	<>	466	ARG	( 519 )	A	NE	D=	4.54	(S-S)
262	GLU	( 315 )	A	CA	<>	493	GLU	( 546 )	A	CD	D=	4.93	(B-S)
262	GLU	( 315 )	A	CA	<>	493	GLU	( 546 )	A	OE1	D=	4.92	(B-S)
262	GLU	( 315 )	A	CA	<>	493	GLU	( 546 )	A	OE2	D=	4.07	(B-S)
262	GLU	( 315 )	A	C	<>	493	GLU	( 546 )	A	CD	D=	5.18	(B-S)
262	GLU	( 315 )	A	C	<>	493	GLU	( 546 )	A	OE2	D=	4.41	(B-S)
262	GLU	( 315 )	A	CB	<>	493	GLU	( 546 )	A	CD	D=	4.96	(S-S)
262	GLU	( 315 )	A	CB	<>	493	GLU	( 546 )	A	OE2	D=	3.85	(S-S)
262	GLU	( 315 )	A	CG	<>	493	GLU	( 546 )	A	OE2	D=	5.00	(S-S)

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Cutoff distance: 3.000

262	GLU	( 315 )	A	N	<>	260	ARG	( 313 )	A	CA	D=	6.06	(B-B)
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262	GLU ( 315 ) A	N <>	260	ARG ( 313 ) A	C	D=	4.78	(B-B)
262	GLU ( 315 ) A	N <>	260	ARG ( 313 ) A	O	D=	5.08	(B-B)
262	GLU ( 315 ) A	CA <>	260	ARG ( 313 ) A	C	D=	6.08	(B-B)
262	GLU ( 315 ) A	N <>	265	ASP ( 318 ) A	N	D=	5.30	(B-B)
262	GLU ( 315 ) A	N <>	265	ASP ( 318 ) A	CA	D=	5.52	(B-B)
262	GLU ( 315 ) A	N <>	265	ASP ( 318 ) A	CB	D=	4.44	(B-S)
262	GLU ( 315 ) A	N <>	265	ASP ( 318 ) A	CG	D=	3.98	(B-S)
262	GLU ( 315 ) A	N <>	265	ASP ( 318 ) A	OD1	D=	4.92	(B-S)
262	GLU ( 315 ) A	N <>	265	ASP ( 318 ) A	OD2	D=	3.09	(B-S)
262	GLU ( 315 ) A	CA <>	265	ASP ( 318 ) A	N	D=	5.44	(B-B)
262	GLU ( 315 ) A	CA <>	265	ASP ( 318 ) A	CA	D=	6.02	(B-B)
262	GLU ( 315 ) A	CA <>	265	ASP ( 318 ) A	CB	D=	5.23	(B-S)
262	GLU ( 315 ) A	CA <>	265	ASP ( 318 ) A	CG	D=	4.84	(B-S)
262	GLU ( 315 ) A	CA <>	265	ASP ( 318 ) A	OD1	D=	5.63	(B-S)
262	GLU ( 315 ) A	CA <>	265	ASP ( 318 ) A	OD2	D=	4.17	(B-S)
262	GLU ( 315 ) A	C <>	265	ASP ( 318 ) A	N	D=	4.27	(B-B)
262	GLU ( 315 ) A	C <>	265	ASP ( 318 ) A	CA	D=	5.08	(B-B)
262	GLU ( 315 ) A	C <>	265	ASP ( 318 ) A	C	D=	6.06	(B-B)
262	GLU ( 315 ) A	C <>	265	ASP ( 318 ) A	O	D=	6.03	(B-B)
262	GLU ( 315 ) A	C <>	265	ASP ( 318 ) A	CB	D=	4.59	(B-S)
262	GLU ( 315 ) A	C <>	265	ASP ( 318 ) A	CG	D=	4.54	(B-S)
262	GLU ( 315 ) A	C <>	265	ASP ( 318 ) A	OD1	D=	5.33	(B-S)
262	GLU ( 315 ) A	C <>	265	ASP ( 318 ) A	OD2	D=	4.25	(B-S)
262	GLU ( 315 ) A	O <>	265	ASP ( 318 ) A	N	D=	3.18	(B-B)
262	GLU ( 315 ) A	O <>	265	ASP ( 318 ) A	CA	D=	3.88	(B-B)
262	GLU ( 315 ) A	O <>	265	ASP ( 318 ) A	C	D=	4.85	(B-B)
262	GLU ( 315 ) A	O <>	265	ASP ( 318 ) A	O	D=	4.88	(B-B)
262	GLU ( 315 ) A	O <>	265	ASP ( 318 ) A	CB	D=	3.41	(B-S)
262	GLU ( 315 ) A	O <>	265	ASP ( 318 ) A	CG	D=	3.55	(B-S)
262	GLU ( 315 ) A	O <>	265	ASP ( 318 ) A	OD1	D=	4.41	(B-S)
262	GLU ( 315 ) A	O <>	265	ASP ( 318 ) A	OD2	D=	3.48	(B-S)
262	GLU ( 315 ) A	CB <>	265	ASP ( 318 ) A	N	D=	6.00	(S-B)
262	GLU ( 315 ) A	CB <>	265	ASP ( 318 ) A	CB	D=	5.95	(S-S)
262	GLU ( 315 ) A	CB <>	265	ASP ( 318 ) A	CG	D=	5.22	(S-S)
262	GLU ( 315 ) A	CB <>	265	ASP ( 318 ) A	OD1	D=	5.72	(S-S)
262	GLU ( 315 ) A	CB <>	265	ASP ( 318 ) A	OD2	D=	4.57	(S-S)
262	GLU ( 315 ) A	CG <>	265	ASP ( 318 ) A	N	D=	5.32	(S-B)
262	GLU ( 315 ) A	CG <>	265	ASP ( 318 ) A	CA	D=	5.90	(S-B)
262	GLU ( 315 ) A	CG <>	265	ASP ( 318 ) A	CB	D=	5.38	(S-S)
262	GLU ( 315 ) A	CG <>	265	ASP ( 318 ) A	CG	D=	4.45	(S-S)
262	GLU ( 315 ) A	CG <>	265	ASP ( 318 ) A	OD1	D=	4.67	(S-S)
262	GLU ( 315 ) A	CG <>	265	ASP ( 318 ) A	OD2	D=	4.02	(S-S)
262	GLU ( 315 ) A	CD <>	265	ASP ( 318 ) A	CB	D=	6.59	(S-S)
262	GLU ( 315 ) A	CD <>	265	ASP ( 318 ) A	CG	D=	5.47	(S-S)
262	GLU ( 315 ) A	CD <>	265	ASP ( 318 ) A	OD1	D=	5.42	(S-S)
262	GLU ( 315 ) A	CD <>	265	ASP ( 318 ) A	OD2	D=	5.03	(S-S)
262	GLU ( 315 ) A	OE2 <>	265	ASP ( 318 ) A	CG	D=	5.40	(S-S)
262	GLU ( 315 ) A	OE2 <>	265	ASP ( 318 ) A	OD1	D=	5.21	(S-S)
262	GLU ( 315 ) A	OE2 <>	265	ASP ( 318 ) A	OD2	D=	4.90	(S-S)
262	GLU ( 315 ) A	O <>	266	HIS ( 319 ) A	N	D=	5.96	(B-B)
262	GLU ( 315 ) A	CA <>	410	LYS ( 463 ) A	NZ	D=	6.41	(B-S)
262	GLU ( 315 ) A	CB <>	410	LYS ( 463 ) A	NZ	D=	5.71	(S-S)
262	GLU ( 315 ) A	OE1 <>	410	LYS ( 463 ) A	NZ	D=	5.96	(S-S)
262	GLU ( 315 ) A	N <>	462	LYS ( 515 ) A	CD	D=	6.15	(B-S)
262	GLU ( 315 ) A	N <>	462	LYS ( 515 ) A	CE	D=	5.53	(B-S)
262	GLU ( 315 ) A	N <>	462	LYS ( 515 ) A	NZ	D=	4.22	(B-S)
262	GLU ( 315 ) A	CA <>	462	LYS ( 515 ) A	CE	D=	6.23	(B-S)

262	GLU	(	315	)	A	CA	<>	462	LYS	(	515	)	A	NZ	D=	5.00	(B-S)
262	GLU	(	315	)	A	C	<>	462	LYS	(	515	)	A	NZ	D=	5.67	(B-S)
262	GLU	(	315	)	A	O	<>	462	LYS	(	515	)	A	NZ	D=	5.41	(B-S)
262	GLU	(	315	)	A	CB	<>	462	LYS	(	515	)	A	CE	D=	5.69	(S-S)
262	GLU	(	315	)	A	CB	<>	462	LYS	(	515	)	A	NZ	D=	4.53	(S-S)
262	GLU	(	315	)	A	CG	<>	462	LYS	(	515	)	A	CD	D=	5.81	(S-S)
262	GLU	(	315	)	A	CG	<>	462	LYS	(	515	)	A	CE	D=	4.60	(S-S)
262	GLU	(	315	)	A	CG	<>	462	LYS	(	515	)	A	NZ	D=	3.72	(S-S)
262	GLU	(	315	)	A	CD	<>	462	LYS	(	515	)	A	CD	D=	5.90	(S-S)
262	GLU	(	315	)	A	CD	<>	462	LYS	(	515	)	A	CE	D=	4.48	(S-S)
262	GLU	(	315	)	A	CD	<>	462	LYS	(	515	)	A	NZ	D=	3.80	(S-S)
262	GLU	(	315	)	A	OE1	<>	462	LYS	(	515	)	A	CE	D=	5.63	(S-S)
262	GLU	(	315	)	A	OE1	<>	462	LYS	(	515	)	A	NZ	D=	5.01	(S-S)
262	GLU	(	315	)	A	OE2	<>	462	LYS	(	515	)	A	CG	D=	5.93	(S-S)
262	GLU	(	315	)	A	OE2	<>	462	LYS	(	515	)	A	CD	D=	5.02	(S-S)
262	GLU	(	315	)	A	OE2	<>	462	LYS	(	515	)	A	CE	D=	3.54	(S-S)
262	GLU	(	315	)	A	OE2	<>	462	LYS	(	515	)	A	NZ	D=	3.01	(S-S)
262	GLU	(	315	)	A	N	<>	466	ARG	(	519	)	A	CB	D=	6.33	(B-S)
262	GLU	(	315	)	A	CA	<>	466	ARG	(	519	)	A	CA	D=	6.50	(B-B)
262	GLU	(	315	)	A	CA	<>	466	ARG	(	519	)	A	CB	D=	6.11	(B-S)
262	GLU	(	315	)	A	C	<>	466	ARG	(	519	)	A	CA	D=	5.77	(B-B)
262	GLU	(	315	)	A	C	<>	466	ARG	(	519	)	A	C	D=	6.24	(B-B)
262	GLU	(	315	)	A	C	<>	466	ARG	(	519	)	A	CB	D=	5.69	(B-S)
262	GLU	(	315	)	A	O	<>	466	ARG	(	519	)	A	CA	D=	5.46	(B-B)
262	GLU	(	315	)	A	O	<>	466	ARG	(	519	)	A	CB	D=	5.38	(B-S)
262	GLU	(	315	)	A	CB	<>	466	ARG	(	519	)	A	CA	D=	5.97	(S-B)
262	GLU	(	315	)	A	CB	<>	466	ARG	(	519	)	A	C	D=	6.18	(S-B)
262	GLU	(	315	)	A	CB	<>	466	ARG	(	519	)	A	CB	D=	5.42	(S-S)
262	GLU	(	315	)	A	CB	<>	466	ARG	(	519	)	A	CG	D=	6.36	(S-S)
262	GLU	(	315	)	A	CB	<>	466	ARG	(	519	)	A	CD	D=	6.43	(S-S)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	N	D=	6.04	(S-B)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	CA	D=	4.69	(S-B)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	C	D=	5.03	(S-B)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	O	D=	6.11	(S-B)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	CB	D=	3.96	(S-S)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	CG	D=	4.87	(S-S)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	CD	D=	4.93	(S-S)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	NE	D=	6.10	(S-S)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	N	D=	6.29	(S-B)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	CA	D=	4.95	(S-B)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	C	D=	5.04	(S-B)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	O	D=	5.92	(S-B)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	CB	D=	4.01	(S-S)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	CG	D=	4.44	(S-S)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	CD	D=	4.32	(S-S)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	NE	D=	5.22	(S-S)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	CZ	D=	6.54	(S-S)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	CA	D=	5.25	(S-B)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	C	D=	4.97	(S-B)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	O	D=	5.73	(S-B)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	CB	D=	4.53	(S-S)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	CG	D=	4.81	(S-S)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	CD	D=	4.88	(S-S)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	NE	D=	5.58	(S-S)
262	GLU	(	315	)	A	OE2	<>	466	ARG	(	519	)	A	CA	D=	5.39	(S-B)
262	GLU	(	315	)	A	OE2	<>	466	ARG	(	519	)	A	C	D=	5.65	(S-B)
262	GLU	(	315	)	A	OE2	<>	466	ARG	(	519	)	A	CB	D=	4.16	(S-S)

262	GLU	( 315 )	A	OE2	<>	466	ARG	( 519 )	A	CG	D=	4.31	(S-S)
262	GLU	( 315 )	A	OE2	<>	466	ARG	( 519 )	A	CD	D=	3.77	(S-S)
262	GLU	( 315 )	A	OE2	<>	466	ARG	( 519 )	A	NE	D=	4.54	(S-S)
262	GLU	( 315 )	A	OE2	<>	466	ARG	( 519 )	A	CZ	D=	5.83	(S-S)
262	GLU	( 315 )	A	N	<>	493	GLU	( 546 )	A	CD	D=	6.27	(B-S)
262	GLU	( 315 )	A	N	<>	493	GLU	( 546 )	A	OE2	D=	5.47	(B-S)
262	GLU	( 315 )	A	CA	<>	493	GLU	( 546 )	A	CG	D=	6.37	(B-S)
262	GLU	( 315 )	A	CA	<>	493	GLU	( 546 )	A	CD	D=	4.93	(B-S)
262	GLU	( 315 )	A	CA	<>	493	GLU	( 546 )	A	OE1	D=	4.92	(B-S)
262	GLU	( 315 )	A	CA	<>	493	GLU	( 546 )	A	OE2	D=	4.07	(B-S)
262	GLU	( 315 )	A	C	<>	493	GLU	( 546 )	A	CG	D=	6.51	(B-S)
262	GLU	( 315 )	A	C	<>	493	GLU	( 546 )	A	CD	D=	5.18	(B-S)
262	GLU	( 315 )	A	C	<>	493	GLU	( 546 )	A	OE1	D=	5.23	(B-S)
262	GLU	( 315 )	A	C	<>	493	GLU	( 546 )	A	OE2	D=	4.41	(B-S)
262	GLU	( 315 )	A	O	<>	493	GLU	( 546 )	A	OE2	D=	5.64	(B-S)
262	GLU	( 315 )	A	CB	<>	493	GLU	( 546 )	A	CG	D=	6.26	(S-S)
262	GLU	( 315 )	A	CB	<>	493	GLU	( 546 )	A	CD	D=	4.96	(S-S)
262	GLU	( 315 )	A	CB	<>	493	GLU	( 546 )	A	OE1	D=	5.26	(S-S)
262	GLU	( 315 )	A	CB	<>	493	GLU	( 546 )	A	OE2	D=	3.85	(S-S)
262	GLU	( 315 )	A	CG	<>	493	GLU	( 546 )	A	CD	D=	6.18	(S-S)
262	GLU	( 315 )	A	CG	<>	493	GLU	( 546 )	A	OE2	D=	5.00	(S-S)
262	GLU	( 315 )	A	CD	<>	493	GLU	( 546 )	A	OE2	D=	5.52	(S-S)
262	GLU	( 315 )	A	OE1	<>	493	GLU	( 546 )	A	OE2	D=	5.10	(S-S)

=====  
Cutoff distance: 4.000

262	GLU	( 315 )	A	N	<>	260	ARG	( 313 )	A	N	D=	7.18	(B-B)
262	GLU	( 315 )	A	N	<>	260	ARG	( 313 )	A	CA	D=	6.06	(B-B)
262	GLU	( 315 )	A	N	<>	260	ARG	( 313 )	A	C	D=	4.78	(B-B)
262	GLU	( 315 )	A	N	<>	260	ARG	( 313 )	A	O	D=	5.08	(B-B)
262	GLU	( 315 )	A	N	<>	260	ARG	( 313 )	A	CB	D=	6.61	(B-S)
262	GLU	( 315 )	A	CA	<>	260	ARG	( 313 )	A	CA	D=	7.24	(B-B)
262	GLU	( 315 )	A	CA	<>	260	ARG	( 313 )	A	C	D=	6.08	(B-B)
262	GLU	( 315 )	A	CA	<>	260	ARG	( 313 )	A	O	D=	6.49	(B-B)
262	GLU	( 315 )	A	C	<>	260	ARG	( 313 )	A	C	D=	7.00	(B-B)
262	GLU	( 315 )	A	O	<>	260	ARG	( 313 )	A	C	D=	6.84	(B-B)
262	GLU	( 315 )	A	CB	<>	260	ARG	( 313 )	A	C	D=	6.81	(S-B)
262	GLU	( 315 )	A	CB	<>	260	ARG	( 313 )	A	O	D=	7.17	(S-B)
262	GLU	( 315 )	A	CG	<>	260	ARG	( 313 )	A	C	D=	7.32	(S-B)
262	GLU	( 315 )	A	N	<>	265	ASP	( 318 )	A	N	D=	5.30	(B-B)
262	GLU	( 315 )	A	N	<>	265	ASP	( 318 )	A	CA	D=	5.52	(B-B)
262	GLU	( 315 )	A	N	<>	265	ASP	( 318 )	A	C	D=	6.57	(B-B)
262	GLU	( 315 )	A	N	<>	265	ASP	( 318 )	A	O	D=	6.85	(B-B)
262	GLU	( 315 )	A	N	<>	265	ASP	( 318 )	A	CB	D=	4.44	(B-S)
262	GLU	( 315 )	A	N	<>	265	ASP	( 318 )	A	CG	D=	3.98	(B-S)
262	GLU	( 315 )	A	N	<>	265	ASP	( 318 )	A	OD1	D=	4.92	(B-S)
262	GLU	( 315 )	A	N	<>	265	ASP	( 318 )	A	OD2	D=	3.09	(B-S)
262	GLU	( 315 )	A	CA	<>	265	ASP	( 318 )	A	N	D=	5.44	(B-B)
262	GLU	( 315 )	A	CA	<>	265	ASP	( 318 )	A	CA	D=	6.02	(B-B)
262	GLU	( 315 )	A	CA	<>	265	ASP	( 318 )	A	C	D=	7.10	(B-B)
262	GLU	( 315 )	A	CA	<>	265	ASP	( 318 )	A	CB	D=	5.23	(B-S)
262	GLU	( 315 )	A	CA	<>	265	ASP	( 318 )	A	CG	D=	4.84	(B-S)
262	GLU	( 315 )	A	CA	<>	265	ASP	( 318 )	A	OD1	D=	5.63	(B-S)
262	GLU	( 315 )	A	CA	<>	265	ASP	( 318 )	A	OD2	D=	4.17	(B-S)
262	GLU	( 315 )	A	C	<>	265	ASP	( 318 )	A	N	D=	4.27	(B-B)
262	GLU	( 315 )	A	C	<>	265	ASP	( 318 )	A	CA	D=	5.08	(B-B)
262	GLU	( 315 )	A	C	<>	265	ASP	( 318 )	A	C	D=	6.06	(B-B)

262	GLU	(	315	)	A	C	<>	265	ASP	(	318	)	A	O	D=	6.03	(B-B)
262	GLU	(	315	)	A	C	<>	265	ASP	(	318	)	A	CB	D=	4.59	(B-S)
262	GLU	(	315	)	A	C	<>	265	ASP	(	318	)	A	CG	D=	4.54	(B-S)
262	GLU	(	315	)	A	C	<>	265	ASP	(	318	)	A	OD1	D=	5.33	(B-S)
262	GLU	(	315	)	A	C	<>	265	ASP	(	318	)	A	OD2	D=	4.25	(B-S)
262	GLU	(	315	)	A	O	<>	265	ASP	(	318	)	A	N	D=	3.18	(B-B)
262	GLU	(	315	)	A	O	<>	265	ASP	(	318	)	A	CA	D=	3.88	(B-B)
262	GLU	(	315	)	A	O	<>	265	ASP	(	318	)	A	C	D=	4.85	(B-B)
262	GLU	(	315	)	A	O	<>	265	ASP	(	318	)	A	O	D=	4.88	(B-B)
262	GLU	(	315	)	A	O	<>	265	ASP	(	318	)	A	CB	D=	3.41	(B-S)
262	GLU	(	315	)	A	O	<>	265	ASP	(	318	)	A	CG	D=	3.55	(B-S)
262	GLU	(	315	)	A	O	<>	265	ASP	(	318	)	A	OD1	D=	4.41	(B-S)
262	GLU	(	315	)	A	O	<>	265	ASP	(	318	)	A	OD2	D=	3.48	(B-S)
262	GLU	(	315	)	A	CB	<>	265	ASP	(	318	)	A	N	D=	6.00	(S-B)
262	GLU	(	315	)	A	CB	<>	265	ASP	(	318	)	A	CA	D=	6.63	(S-B)
262	GLU	(	315	)	A	CB	<>	265	ASP	(	318	)	A	CB	D=	5.95	(S-S)
262	GLU	(	315	)	A	CB	<>	265	ASP	(	318	)	A	CG	D=	5.22	(S-S)
262	GLU	(	315	)	A	CB	<>	265	ASP	(	318	)	A	OD1	D=	5.72	(S-S)
262	GLU	(	315	)	A	CB	<>	265	ASP	(	318	)	A	OD2	D=	4.57	(S-S)
262	GLU	(	315	)	A	CG	<>	265	ASP	(	318	)	A	N	D=	5.32	(S-B)
262	GLU	(	315	)	A	CG	<>	265	ASP	(	318	)	A	CA	D=	5.90	(S-B)
262	GLU	(	315	)	A	CG	<>	265	ASP	(	318	)	A	C	D=	7.31	(S-B)
262	GLU	(	315	)	A	CG	<>	265	ASP	(	318	)	A	CB	D=	5.38	(S-S)
262	GLU	(	315	)	A	CG	<>	265	ASP	(	318	)	A	CG	D=	4.45	(S-S)
262	GLU	(	315	)	A	CG	<>	265	ASP	(	318	)	A	OD1	D=	4.67	(S-S)
262	GLU	(	315	)	A	CG	<>	265	ASP	(	318	)	A	OD2	D=	4.02	(S-S)
262	GLU	(	315	)	A	CD	<>	265	ASP	(	318	)	A	N	D=	6.54	(S-B)
262	GLU	(	315	)	A	CD	<>	265	ASP	(	318	)	A	CA	D=	7.07	(S-B)
262	GLU	(	315	)	A	CD	<>	265	ASP	(	318	)	A	CB	D=	6.59	(S-S)
262	GLU	(	315	)	A	CD	<>	265	ASP	(	318	)	A	CG	D=	5.47	(S-S)
262	GLU	(	315	)	A	CD	<>	265	ASP	(	318	)	A	OD1	D=	5.42	(S-S)
262	GLU	(	315	)	A	CD	<>	265	ASP	(	318	)	A	OD2	D=	5.03	(S-S)
262	GLU	(	315	)	A	OE1	<>	265	ASP	(	318	)	A	CG	D=	6.63	(S-S)
262	GLU	(	315	)	A	OE1	<>	265	ASP	(	318	)	A	OD1	D=	6.56	(S-S)
262	GLU	(	315	)	A	OE1	<>	265	ASP	(	318	)	A	OD2	D=	6.23	(S-S)
262	GLU	(	315	)	A	OE2	<>	265	ASP	(	318	)	A	N	D=	6.99	(S-B)
262	GLU	(	315	)	A	OE2	<>	265	ASP	(	318	)	A	CB	D=	6.71	(S-S)
262	GLU	(	315	)	A	OE2	<>	265	ASP	(	318	)	A	CG	D=	5.40	(S-S)
262	GLU	(	315	)	A	OE2	<>	265	ASP	(	318	)	A	OD1	D=	5.21	(S-S)
262	GLU	(	315	)	A	OE2	<>	265	ASP	(	318	)	A	OD2	D=	4.90	(S-S)
262	GLU	(	315	)	A	N	<>	266	HIS	(	319	)	A	N	D=	7.40	(B-B)
262	GLU	(	315	)	A	C	<>	266	HIS	(	319	)	A	N	D=	7.19	(B-B)
262	GLU	(	315	)	A	O	<>	266	HIS	(	319	)	A	N	D=	5.96	(B-B)
262	GLU	(	315	)	A	O	<>	266	HIS	(	319	)	A	CA	D=	7.10	(B-B)
262	GLU	(	315	)	A	N	<>	410	LYS	(	463	)	A	N	D=	7.35	(B-B)
262	GLU	(	315	)	A	CA	<>	410	LYS	(	463	)	A	N	D=	6.66	(B-B)
262	GLU	(	315	)	A	CA	<>	410	LYS	(	463	)	A	CG	D=	7.28	(B-S)
262	GLU	(	315	)	A	CA	<>	410	LYS	(	463	)	A	NZ	D=	6.41	(B-S)
262	GLU	(	315	)	A	C	<>	410	LYS	(	463	)	A	N	D=	7.29	(B-B)
262	GLU	(	315	)	A	C	<>	410	LYS	(	463	)	A	NZ	D=	7.38	(B-S)
262	GLU	(	315	)	A	CB	<>	410	LYS	(	463	)	A	N	D=	7.24	(S-B)
262	GLU	(	315	)	A	CB	<>	410	LYS	(	463	)	A	CG	D=	7.23	(S-S)
262	GLU	(	315	)	A	CB	<>	410	LYS	(	463	)	A	CE	D=	7.10	(S-S)
262	GLU	(	315	)	A	CB	<>	410	LYS	(	463	)	A	NZ	D=	5.71	(S-S)
262	GLU	(	315	)	A	CG	<>	410	LYS	(	463	)	A	NZ	D=	6.83	(S-S)
262	GLU	(	315	)	A	CD	<>	410	LYS	(	463	)	A	NZ	D=	6.64	(S-S)
262	GLU	(	315	)	A	OE1	<>	410	LYS	(	463	)	A	NZ	D=	5.96	(S-S)

262	GLU	(	315	)	A	N	<>	462	LYS	(	515	)	A	CG	D=	7.49	(B-S)
262	GLU	(	315	)	A	N	<>	462	LYS	(	515	)	A	CD	D=	6.15	(B-S)
262	GLU	(	315	)	A	N	<>	462	LYS	(	515	)	A	CE	D=	5.53	(B-S)
262	GLU	(	315	)	A	N	<>	462	LYS	(	515	)	A	NZ	D=	4.22	(B-S)
262	GLU	(	315	)	A	CA	<>	462	LYS	(	515	)	A	CD	D=	7.08	(B-S)
262	GLU	(	315	)	A	CA	<>	462	LYS	(	515	)	A	CE	D=	6.23	(B-S)
262	GLU	(	315	)	A	CA	<>	462	LYS	(	515	)	A	NZ	D=	5.00	(B-S)
262	GLU	(	315	)	A	C	<>	462	LYS	(	515	)	A	CD	D=	7.45	(B-S)
262	GLU	(	315	)	A	C	<>	462	LYS	(	515	)	A	CE	D=	6.70	(B-S)
262	GLU	(	315	)	A	C	<>	462	LYS	(	515	)	A	NZ	D=	5.67	(B-S)
262	GLU	(	315	)	A	O	<>	462	LYS	(	515	)	A	CD	D=	6.85	(B-S)
262	GLU	(	315	)	A	O	<>	462	LYS	(	515	)	A	CE	D=	6.29	(B-S)
262	GLU	(	315	)	A	O	<>	462	LYS	(	515	)	A	NZ	D=	5.41	(B-S)
262	GLU	(	315	)	A	CB	<>	462	LYS	(	515	)	A	CD	D=	6.80	(S-S)
262	GLU	(	315	)	A	CB	<>	462	LYS	(	515	)	A	CE	D=	5.69	(S-S)
262	GLU	(	315	)	A	CB	<>	462	LYS	(	515	)	A	NZ	D=	4.53	(S-S)
262	GLU	(	315	)	A	CG	<>	462	LYS	(	515	)	A	CG	D=	6.85	(S-S)
262	GLU	(	315	)	A	CG	<>	462	LYS	(	515	)	A	CD	D=	5.81	(S-S)
262	GLU	(	315	)	A	CG	<>	462	LYS	(	515	)	A	CE	D=	4.60	(S-S)
262	GLU	(	315	)	A	CG	<>	462	LYS	(	515	)	A	NZ	D=	3.72	(S-S)
262	GLU	(	315	)	A	CD	<>	462	LYS	(	515	)	A	CG	D=	6.84	(S-S)
262	GLU	(	315	)	A	CD	<>	462	LYS	(	515	)	A	CD	D=	5.90	(S-S)
262	GLU	(	315	)	A	CD	<>	462	LYS	(	515	)	A	CE	D=	4.48	(S-S)
262	GLU	(	315	)	A	CD	<>	462	LYS	(	515	)	A	NZ	D=	3.80	(S-S)
262	GLU	(	315	)	A	OE1	<>	462	LYS	(	515	)	A	CD	D=	7.08	(S-S)
262	GLU	(	315	)	A	OE1	<>	462	LYS	(	515	)	A	CE	D=	5.63	(S-S)
262	GLU	(	315	)	A	OE1	<>	462	LYS	(	515	)	A	NZ	D=	5.01	(S-S)
262	GLU	(	315	)	A	OE2	<>	462	LYS	(	515	)	A	CG	D=	5.93	(S-S)
262	GLU	(	315	)	A	OE2	<>	462	LYS	(	515	)	A	CD	D=	5.02	(S-S)
262	GLU	(	315	)	A	OE2	<>	462	LYS	(	515	)	A	CE	D=	3.54	(S-S)
262	GLU	(	315	)	A	OE2	<>	462	LYS	(	515	)	A	NZ	D=	3.01	(S-S)
262	GLU	(	315	)	A	N	<>	466	ARG	(	519	)	A	CA	D=	6.92	(B-B)
262	GLU	(	315	)	A	N	<>	466	ARG	(	519	)	A	CB	D=	6.33	(B-S)
262	GLU	(	315	)	A	N	<>	466	ARG	(	519	)	A	CG	D=	7.47	(B-S)
262	GLU	(	315	)	A	N	<>	466	ARG	(	519	)	A	CD	D=	7.37	(B-S)
262	GLU	(	315	)	A	CA	<>	466	ARG	(	519	)	A	CA	D=	6.50	(B-B)
262	GLU	(	315	)	A	CA	<>	466	ARG	(	519	)	A	C	D=	6.90	(B-B)
262	GLU	(	315	)	A	CA	<>	466	ARG	(	519	)	A	CB	D=	6.11	(B-S)
262	GLU	(	315	)	A	CA	<>	466	ARG	(	519	)	A	CG	D=	7.27	(B-S)
262	GLU	(	315	)	A	CA	<>	466	ARG	(	519	)	A	CD	D=	7.38	(B-S)
262	GLU	(	315	)	A	C	<>	466	ARG	(	519	)	A	N	D=	6.97	(B-B)
262	GLU	(	315	)	A	C	<>	466	ARG	(	519	)	A	CA	D=	5.77	(B-B)
262	GLU	(	315	)	A	C	<>	466	ARG	(	519	)	A	C	D=	6.24	(B-B)
262	GLU	(	315	)	A	C	<>	466	ARG	(	519	)	A	CB	D=	5.69	(B-S)
262	GLU	(	315	)	A	C	<>	466	ARG	(	519	)	A	CG	D=	7.04	(B-S)
262	GLU	(	315	)	A	C	<>	466	ARG	(	519	)	A	CD	D=	7.41	(B-S)
262	GLU	(	315	)	A	O	<>	466	ARG	(	519	)	A	N	D=	6.49	(B-B)
262	GLU	(	315	)	A	O	<>	466	ARG	(	519	)	A	CA	D=	5.46	(B-B)
262	GLU	(	315	)	A	O	<>	466	ARG	(	519	)	A	C	D=	6.21	(B-B)
262	GLU	(	315	)	A	O	<>	466	ARG	(	519	)	A	CB	D=	5.38	(B-S)
262	GLU	(	315	)	A	O	<>	466	ARG	(	519	)	A	CG	D=	6.81	(B-S)
262	GLU	(	315	)	A	O	<>	466	ARG	(	519	)	A	CD	D=	7.16	(B-S)
262	GLU	(	315	)	A	CB	<>	466	ARG	(	519	)	A	N	D=	7.35	(S-B)
262	GLU	(	315	)	A	CB	<>	466	ARG	(	519	)	A	CA	D=	5.97	(S-B)
262	GLU	(	315	)	A	CB	<>	466	ARG	(	519	)	A	C	D=	6.18	(S-B)
262	GLU	(	315	)	A	CB	<>	466	ARG	(	519	)	A	CB	D=	5.42	(S-S)
262	GLU	(	315	)	A	CB	<>	466	ARG	(	519	)	A	CG	D=	6.36	(S-S)

262	GLU	(	315	)	A	CB	<>	466	ARG	(	519	)	A	CD	D=	6.43	(S-S)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	N	D=	6.04	(S-B)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	CA	D=	4.69	(S-B)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	C	D=	5.03	(S-B)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	O	D=	6.11	(S-B)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	CB	D=	3.96	(S-S)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	CG	D=	4.87	(S-S)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	CD	D=	4.93	(S-S)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	NE	D=	6.10	(S-S)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	CZ	D=	7.36	(S-S)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	N	D=	6.29	(S-B)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	CA	D=	4.95	(S-B)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	C	D=	5.04	(S-B)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	O	D=	5.92	(S-B)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	CB	D=	4.01	(S-S)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	CG	D=	4.44	(S-S)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	CD	D=	4.32	(S-S)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	NE	D=	5.22	(S-S)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	CZ	D=	6.54	(S-S)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	NH1	D=	7.34	(S-S)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	NH2	D=	7.26	(S-S)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	N	D=	6.64	(S-B)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	CA	D=	5.25	(S-B)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	C	D=	4.97	(S-B)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	O	D=	5.73	(S-B)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	CB	D=	4.53	(S-S)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	CG	D=	4.81	(S-S)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	CD	D=	4.88	(S-S)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	NE	D=	5.58	(S-S)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	CZ	D=	6.90	(S-S)
262	GLU	(	315	)	A	OE2	<>	466	ARG	(	519	)	A	N	D=	6.58	(S-B)
262	GLU	(	315	)	A	OE2	<>	466	ARG	(	519	)	A	CA	D=	5.39	(S-B)
262	GLU	(	315	)	A	OE2	<>	466	ARG	(	519	)	A	C	D=	5.65	(S-B)
262	GLU	(	315	)	A	OE2	<>	466	ARG	(	519	)	A	O	D=	6.42	(S-B)
262	GLU	(	315	)	A	OE2	<>	466	ARG	(	519	)	A	CB	D=	4.16	(S-S)
262	GLU	(	315	)	A	OE2	<>	466	ARG	(	519	)	A	CG	D=	4.31	(S-S)
262	GLU	(	315	)	A	OE2	<>	466	ARG	(	519	)	A	CD	D=	3.77	(S-S)
262	GLU	(	315	)	A	OE2	<>	466	ARG	(	519	)	A	NE	D=	4.54	(S-S)
262	GLU	(	315	)	A	OE2	<>	466	ARG	(	519	)	A	CZ	D=	5.83	(S-S)
262	GLU	(	315	)	A	OE2	<>	466	ARG	(	519	)	A	NH1	D=	6.60	(S-S)
262	GLU	(	315	)	A	OE2	<>	466	ARG	(	519	)	A	NH2	D=	6.59	(S-S)
262	GLU	(	315	)	A	N	<>	493	GLU	(	546	)	A	CD	D=	6.27	(B-S)
262	GLU	(	315	)	A	N	<>	493	GLU	(	546	)	A	OE1	D=	6.10	(B-S)
262	GLU	(	315	)	A	N	<>	493	GLU	(	546	)	A	OE2	D=	5.47	(B-S)
262	GLU	(	315	)	A	CA	<>	493	GLU	(	546	)	A	CB	D=	7.01	(B-S)
262	GLU	(	315	)	A	CA	<>	493	GLU	(	546	)	A	CG	D=	6.37	(B-S)
262	GLU	(	315	)	A	CA	<>	493	GLU	(	546	)	A	CD	D=	4.93	(B-S)
262	GLU	(	315	)	A	CA	<>	493	GLU	(	546	)	A	OE1	D=	4.92	(B-S)
262	GLU	(	315	)	A	CA	<>	493	GLU	(	546	)	A	OE2	D=	4.07	(B-S)
262	GLU	(	315	)	A	C	<>	493	GLU	(	546	)	A	CB	D=	6.83	(B-S)
262	GLU	(	315	)	A	C	<>	493	GLU	(	546	)	A	CG	D=	6.51	(B-S)
262	GLU	(	315	)	A	C	<>	493	GLU	(	546	)	A	CD	D=	5.18	(B-S)
262	GLU	(	315	)	A	C	<>	493	GLU	(	546	)	A	OE1	D=	5.23	(B-S)
262	GLU	(	315	)	A	C	<>	493	GLU	(	546	)	A	OE2	D=	4.41	(B-S)
262	GLU	(	315	)	A	O	<>	493	GLU	(	546	)	A	CD	D=	6.39	(B-S)
262	GLU	(	315	)	A	O	<>	493	GLU	(	546	)	A	OE1	D=	6.40	(B-S)
262	GLU	(	315	)	A	O	<>	493	GLU	(	546	)	A	OE2	D=	5.64	(B-S)



262	GLU	( 315 )	A	CB	<>	493	GLU	( 546 )	A	CB	D=	7.09	(S-S)
262	GLU	( 315 )	A	CB	<>	493	GLU	( 546 )	A	CG	D=	6.26	(S-S)
262	GLU	( 315 )	A	CB	<>	493	GLU	( 546 )	A	CD	D=	4.96	(S-S)
262	GLU	( 315 )	A	CB	<>	493	GLU	( 546 )	A	OE1	D=	5.26	(S-S)
262	GLU	( 315 )	A	CB	<>	493	GLU	( 546 )	A	OE2	D=	3.85	(S-S)
262	GLU	( 315 )	A	CG	<>	493	GLU	( 546 )	A	CG	D=	7.36	(S-S)
262	GLU	( 315 )	A	CG	<>	493	GLU	( 546 )	A	CD	D=	6.18	(S-S)
262	GLU	( 315 )	A	CG	<>	493	GLU	( 546 )	A	OE1	D=	6.62	(S-S)
262	GLU	( 315 )	A	CG	<>	493	GLU	( 546 )	A	OE2	D=	5.00	(S-S)
262	GLU	( 315 )	A	CD	<>	493	GLU	( 546 )	A	CD	D=	6.76	(S-S)
262	GLU	( 315 )	A	CD	<>	493	GLU	( 546 )	A	OE2	D=	5.52	(S-S)
262	GLU	( 315 )	A	OE1	<>	493	GLU	( 546 )	A	CG	D=	7.18	(S-S)
262	GLU	( 315 )	A	OE1	<>	493	GLU	( 546 )	A	CD	D=	6.34	(S-S)
262	GLU	( 315 )	A	OE1	<>	493	GLU	( 546 )	A	OE2	D=	5.10	(S-S)
262	GLU	( 315 )	A	OE2	<>	493	GLU	( 546 )	A	OE2	D=	6.66	(S-S)

=====  
Cutoff distance: 5.000

262	GLU	( 315 )	A	N	<>	260	ARG	( 313 )	A	N	D=	7.18	(B-B)
262	GLU	( 315 )	A	N	<>	260	ARG	( 313 )	A	CA	D=	6.06	(B-B)
262	GLU	( 315 )	A	N	<>	260	ARG	( 313 )	A	C	D=	4.78	(B-B)
262	GLU	( 315 )	A	N	<>	260	ARG	( 313 )	A	O	D=	5.08	(B-B)
262	GLU	( 315 )	A	N	<>	260	ARG	( 313 )	A	CB	D=	6.61	(B-S)
262	GLU	( 315 )	A	N	<>	260	ARG	( 313 )	A	CG	D=	7.95	(B-S)
262	GLU	( 315 )	A	CA	<>	260	ARG	( 313 )	A	N	D=	8.44	(B-B)
262	GLU	( 315 )	A	CA	<>	260	ARG	( 313 )	A	CA	D=	7.24	(B-B)
262	GLU	( 315 )	A	CA	<>	260	ARG	( 313 )	A	C	D=	6.08	(B-B)
262	GLU	( 315 )	A	CA	<>	260	ARG	( 313 )	A	O	D=	6.49	(B-B)
262	GLU	( 315 )	A	CA	<>	260	ARG	( 313 )	A	CB	D=	7.70	(B-S)
262	GLU	( 315 )	A	C	<>	260	ARG	( 313 )	A	CA	D=	8.26	(B-B)
262	GLU	( 315 )	A	C	<>	260	ARG	( 313 )	A	C	D=	7.00	(B-B)
262	GLU	( 315 )	A	C	<>	260	ARG	( 313 )	A	O	D=	7.27	(B-B)
262	GLU	( 315 )	A	O	<>	260	ARG	( 313 )	A	C	D=	6.84	(B-B)
262	GLU	( 315 )	A	O	<>	260	ARG	( 313 )	A	O	D=	6.92	(B-B)
262	GLU	( 315 )	A	CB	<>	260	ARG	( 313 )	A	CA	D=	7.92	(S-B)
262	GLU	( 315 )	A	CB	<>	260	ARG	( 313 )	A	C	D=	6.81	(S-B)
262	GLU	( 315 )	A	CB	<>	260	ARG	( 313 )	A	O	D=	7.17	(S-B)
262	GLU	( 315 )	A	CB	<>	260	ARG	( 313 )	A	CB	D=	8.12	(S-S)
262	GLU	( 315 )	A	CG	<>	260	ARG	( 313 )	A	CA	D=	8.57	(S-B)
262	GLU	( 315 )	A	CG	<>	260	ARG	( 313 )	A	C	D=	7.32	(S-B)
262	GLU	( 315 )	A	CG	<>	260	ARG	( 313 )	A	O	D=	7.45	(S-B)
262	GLU	( 315 )	A	CD	<>	260	ARG	( 313 )	A	C	D=	8.10	(S-B)
262	GLU	( 315 )	A	OE2	<>	260	ARG	( 313 )	A	C	D=	7.89	(S-B)
262	GLU	( 315 )	A	N	<>	265	ASP	( 318 )	A	N	D=	5.30	(B-B)
262	GLU	( 315 )	A	N	<>	265	ASP	( 318 )	A	CA	D=	5.52	(B-B)
262	GLU	( 315 )	A	N	<>	265	ASP	( 318 )	A	C	D=	6.57	(B-B)
262	GLU	( 315 )	A	N	<>	265	ASP	( 318 )	A	O	D=	6.85	(B-B)
262	GLU	( 315 )	A	N	<>	265	ASP	( 318 )	A	CB	D=	4.44	(B-S)
262	GLU	( 315 )	A	N	<>	265	ASP	( 318 )	A	CG	D=	3.98	(B-S)
262	GLU	( 315 )	A	N	<>	265	ASP	( 318 )	A	OD1	D=	4.92	(B-S)
262	GLU	( 315 )	A	N	<>	265	ASP	( 318 )	A	OD2	D=	3.09	(B-S)
262	GLU	( 315 )	A	CA	<>	265	ASP	( 318 )	A	N	D=	5.44	(B-B)
262	GLU	( 315 )	A	CA	<>	265	ASP	( 318 )	A	CA	D=	6.02	(B-B)
262	GLU	( 315 )	A	CA	<>	265	ASP	( 318 )	A	C	D=	7.10	(B-B)
262	GLU	( 315 )	A	CA	<>	265	ASP	( 318 )	A	O	D=	7.23	(B-B)
262	GLU	( 315 )	A	CA	<>	265	ASP	( 318 )	A	CB	D=	5.23	(B-S)
262	GLU	( 315 )	A	CA	<>	265	ASP	( 318 )	A	CG	D=	4.84	(B-S)

262	GLU	(	315	)	A	CA	<>	265	ASP	(	318	)	A	OD1	D=	5.63	(B-S)
262	GLU	(	315	)	A	CA	<>	265	ASP	(	318	)	A	OD2	D=	4.17	(B-S)
262	GLU	(	315	)	A	C	<>	265	ASP	(	318	)	A	N	D=	4.27	(B-B)
262	GLU	(	315	)	A	C	<>	265	ASP	(	318	)	A	CA	D=	5.08	(B-B)
262	GLU	(	315	)	A	C	<>	265	ASP	(	318	)	A	C	D=	6.06	(B-B)
262	GLU	(	315	)	A	C	<>	265	ASP	(	318	)	A	O	D=	6.03	(B-B)
262	GLU	(	315	)	A	C	<>	265	ASP	(	318	)	A	CB	D=	4.59	(B-S)
262	GLU	(	315	)	A	C	<>	265	ASP	(	318	)	A	CG	D=	4.54	(B-S)
262	GLU	(	315	)	A	C	<>	265	ASP	(	318	)	A	OD1	D=	5.33	(B-S)
262	GLU	(	315	)	A	C	<>	265	ASP	(	318	)	A	OD2	D=	4.25	(B-S)
262	GLU	(	315	)	A	O	<>	265	ASP	(	318	)	A	N	D=	3.18	(B-B)
262	GLU	(	315	)	A	O	<>	265	ASP	(	318	)	A	CA	D=	3.88	(B-B)
262	GLU	(	315	)	A	O	<>	265	ASP	(	318	)	A	C	D=	4.85	(B-B)
262	GLU	(	315	)	A	O	<>	265	ASP	(	318	)	A	O	D=	4.88	(B-B)
262	GLU	(	315	)	A	O	<>	265	ASP	(	318	)	A	CB	D=	3.41	(B-S)
262	GLU	(	315	)	A	O	<>	265	ASP	(	318	)	A	CG	D=	3.55	(B-S)
262	GLU	(	315	)	A	O	<>	265	ASP	(	318	)	A	OD1	D=	4.41	(B-S)
262	GLU	(	315	)	A	O	<>	265	ASP	(	318	)	A	OD2	D=	3.48	(B-S)
262	GLU	(	315	)	A	CB	<>	265	ASP	(	318	)	A	N	D=	6.00	(S-B)
262	GLU	(	315	)	A	CB	<>	265	ASP	(	318	)	A	CA	D=	6.63	(S-B)
262	GLU	(	315	)	A	CB	<>	265	ASP	(	318	)	A	C	D=	7.89	(S-B)
262	GLU	(	315	)	A	CB	<>	265	ASP	(	318	)	A	O	D=	8.14	(S-B)
262	GLU	(	315	)	A	CB	<>	265	ASP	(	318	)	A	CB	D=	5.95	(S-S)
262	GLU	(	315	)	A	CB	<>	265	ASP	(	318	)	A	CG	D=	5.22	(S-S)
262	GLU	(	315	)	A	CB	<>	265	ASP	(	318	)	A	OD1	D=	5.72	(S-S)
262	GLU	(	315	)	A	CB	<>	265	ASP	(	318	)	A	OD2	D=	4.57	(S-S)
262	GLU	(	315	)	A	CG	<>	265	ASP	(	318	)	A	N	D=	5.32	(S-B)
262	GLU	(	315	)	A	CG	<>	265	ASP	(	318	)	A	CA	D=	5.90	(S-B)
262	GLU	(	315	)	A	CG	<>	265	ASP	(	318	)	A	C	D=	7.31	(S-B)
262	GLU	(	315	)	A	CG	<>	265	ASP	(	318	)	A	O	D=	7.70	(S-B)
262	GLU	(	315	)	A	CG	<>	265	ASP	(	318	)	A	CB	D=	5.38	(S-S)
262	GLU	(	315	)	A	CG	<>	265	ASP	(	318	)	A	CG	D=	4.45	(S-S)
262	GLU	(	315	)	A	CG	<>	265	ASP	(	318	)	A	OD1	D=	4.67	(S-S)
262	GLU	(	315	)	A	CG	<>	265	ASP	(	318	)	A	OD2	D=	4.02	(S-S)
262	GLU	(	315	)	A	CD	<>	265	ASP	(	318	)	A	N	D=	6.54	(S-B)
262	GLU	(	315	)	A	CD	<>	265	ASP	(	318	)	A	CA	D=	7.07	(S-B)
262	GLU	(	315	)	A	CD	<>	265	ASP	(	318	)	A	C	D=	8.54	(S-B)
262	GLU	(	315	)	A	CD	<>	265	ASP	(	318	)	A	CB	D=	6.59	(S-S)
262	GLU	(	315	)	A	CD	<>	265	ASP	(	318	)	A	CG	D=	5.47	(S-S)
262	GLU	(	315	)	A	CD	<>	265	ASP	(	318	)	A	OD1	D=	5.42	(S-S)
262	GLU	(	315	)	A	CD	<>	265	ASP	(	318	)	A	OD2	D=	5.03	(S-S)
262	GLU	(	315	)	A	OE1	<>	265	ASP	(	318	)	A	N	D=	7.34	(S-B)
262	GLU	(	315	)	A	OE1	<>	265	ASP	(	318	)	A	CA	D=	8.02	(S-B)
262	GLU	(	315	)	A	OE1	<>	265	ASP	(	318	)	A	CB	D=	7.67	(S-S)
262	GLU	(	315	)	A	OE1	<>	265	ASP	(	318	)	A	CG	D=	6.63	(S-S)
262	GLU	(	315	)	A	OE1	<>	265	ASP	(	318	)	A	OD1	D=	6.56	(S-S)
262	GLU	(	315	)	A	OE1	<>	265	ASP	(	318	)	A	OD2	D=	6.23	(S-S)
262	GLU	(	315	)	A	OE2	<>	265	ASP	(	318	)	A	N	D=	6.99	(S-B)
262	GLU	(	315	)	A	OE2	<>	265	ASP	(	318	)	A	CA	D=	7.28	(S-B)
262	GLU	(	315	)	A	OE2	<>	265	ASP	(	318	)	A	CB	D=	6.71	(S-S)
262	GLU	(	315	)	A	OE2	<>	265	ASP	(	318	)	A	CG	D=	5.40	(S-S)
262	GLU	(	315	)	A	OE2	<>	265	ASP	(	318	)	A	OD1	D=	5.21	(S-S)
262	GLU	(	315	)	A	OE2	<>	265	ASP	(	318	)	A	OD2	D=	4.90	(S-S)
262	GLU	(	315	)	A	N	<>	266	HIS	(	319	)	A	N	D=	7.40	(B-B)
262	GLU	(	315	)	A	CA	<>	266	HIS	(	319	)	A	N	D=	8.10	(B-B)
262	GLU	(	315	)	A	C	<>	266	HIS	(	319	)	A	N	D=	7.19	(B-B)
262	GLU	(	315	)	A	C	<>	266	HIS	(	319	)	A	CA	D=	8.31	(B-B)

262	GLU	( 315 )	A	O	<>	266	HIS	( 319 )	A	N	D=	5.96	(B-B)
262	GLU	( 315 )	A	O	<>	266	HIS	( 319 )	A	CA	D=	7.10	(B-B)
262	GLU	( 315 )	A	O	<>	266	HIS	( 319 )	A	C	D=	7.54	(B-B)
262	GLU	( 315 )	A	O	<>	266	HIS	( 319 )	A	O	D=	7.59	(B-B)
262	GLU	( 315 )	A	CG	<>	266	HIS	( 319 )	A	N	D=	8.24	(S-B)
262	GLU	( 315 )	A	N	<>	410	LYS	( 463 )	A	N	D=	7.35	(B-B)
262	GLU	( 315 )	A	N	<>	410	LYS	( 463 )	A	CG	D=	8.21	(B-S)
262	GLU	( 315 )	A	N	<>	410	LYS	( 463 )	A	NZ	D=	7.48	(B-S)
262	GLU	( 315 )	A	CA	<>	410	LYS	( 463 )	A	N	D=	6.66	(B-B)
262	GLU	( 315 )	A	CA	<>	410	LYS	( 463 )	A	CA	D=	7.91	(B-B)
262	GLU	( 315 )	A	CA	<>	410	LYS	( 463 )	A	CB	D=	8.04	(B-S)
262	GLU	( 315 )	A	CA	<>	410	LYS	( 463 )	A	CG	D=	7.28	(B-S)
262	GLU	( 315 )	A	CA	<>	410	LYS	( 463 )	A	CD	D=	7.95	(B-S)
262	GLU	( 315 )	A	CA	<>	410	LYS	( 463 )	A	CE	D=	7.67	(B-S)
262	GLU	( 315 )	A	CA	<>	410	LYS	( 463 )	A	NZ	D=	6.41	(B-S)
262	GLU	( 315 )	A	C	<>	410	LYS	( 463 )	A	N	D=	7.29	(B-B)
262	GLU	( 315 )	A	C	<>	410	LYS	( 463 )	A	CG	D=	8.15	(B-S)
262	GLU	( 315 )	A	C	<>	410	LYS	( 463 )	A	NZ	D=	7.38	(B-S)
262	GLU	( 315 )	A	CB	<>	410	LYS	( 463 )	A	N	D=	7.24	(S-B)
262	GLU	( 315 )	A	CB	<>	410	LYS	( 463 )	A	CA	D=	8.33	(S-B)
262	GLU	( 315 )	A	CB	<>	410	LYS	( 463 )	A	CB	D=	8.21	(S-S)
262	GLU	( 315 )	A	CB	<>	410	LYS	( 463 )	A	CG	D=	7.23	(S-S)
262	GLU	( 315 )	A	CB	<>	410	LYS	( 463 )	A	CD	D=	7.63	(S-S)
262	GLU	( 315 )	A	CB	<>	410	LYS	( 463 )	A	CE	D=	7.10	(S-S)
262	GLU	( 315 )	A	CB	<>	410	LYS	( 463 )	A	NZ	D=	5.71	(S-S)
262	GLU	( 315 )	A	CG	<>	410	LYS	( 463 )	A	CE	D=	8.28	(S-S)
262	GLU	( 315 )	A	CG	<>	410	LYS	( 463 )	A	NZ	D=	6.83	(S-S)
262	GLU	( 315 )	A	CD	<>	410	LYS	( 463 )	A	CE	D=	8.11	(S-S)
262	GLU	( 315 )	A	CD	<>	410	LYS	( 463 )	A	NZ	D=	6.64	(S-S)
262	GLU	( 315 )	A	OE1	<>	410	LYS	( 463 )	A	CE	D=	7.45	(S-S)
262	GLU	( 315 )	A	OE1	<>	410	LYS	( 463 )	A	NZ	D=	5.96	(S-S)
262	GLU	( 315 )	A	OE2	<>	410	LYS	( 463 )	A	NZ	D=	7.43	(S-S)
262	GLU	( 315 )	A	O	<>	461	ARG	( 514 )	A	O	D=	7.49	(B-B)
262	GLU	( 315 )	A	N	<>	462	LYS	( 515 )	A	CA	D=	7.90	(B-B)
262	GLU	( 315 )	A	N	<>	462	LYS	( 515 )	A	CB	D=	8.19	(B-S)
262	GLU	( 315 )	A	N	<>	462	LYS	( 515 )	A	CG	D=	7.49	(B-S)
262	GLU	( 315 )	A	N	<>	462	LYS	( 515 )	A	CD	D=	6.15	(B-S)
262	GLU	( 315 )	A	N	<>	462	LYS	( 515 )	A	CE	D=	5.53	(B-S)
262	GLU	( 315 )	A	N	<>	462	LYS	( 515 )	A	NZ	D=	4.22	(B-S)
262	GLU	( 315 )	A	CA	<>	462	LYS	( 515 )	A	CG	D=	8.34	(B-S)
262	GLU	( 315 )	A	CA	<>	462	LYS	( 515 )	A	CD	D=	7.08	(B-S)
262	GLU	( 315 )	A	CA	<>	462	LYS	( 515 )	A	CE	D=	6.23	(B-S)
262	GLU	( 315 )	A	CA	<>	462	LYS	( 515 )	A	NZ	D=	5.00	(B-S)
262	GLU	( 315 )	A	C	<>	462	LYS	( 515 )	A	CG	D=	8.55	(B-S)
262	GLU	( 315 )	A	C	<>	462	LYS	( 515 )	A	CD	D=	7.45	(B-S)
262	GLU	( 315 )	A	C	<>	462	LYS	( 515 )	A	CE	D=	6.70	(B-S)
262	GLU	( 315 )	A	C	<>	462	LYS	( 515 )	A	NZ	D=	5.67	(B-S)
262	GLU	( 315 )	A	O	<>	462	LYS	( 515 )	A	CA	D=	7.80	(B-B)
262	GLU	( 315 )	A	O	<>	462	LYS	( 515 )	A	CG	D=	7.87	(B-S)
262	GLU	( 315 )	A	O	<>	462	LYS	( 515 )	A	CD	D=	6.85	(B-S)
262	GLU	( 315 )	A	O	<>	462	LYS	( 515 )	A	CE	D=	6.29	(B-S)
262	GLU	( 315 )	A	O	<>	462	LYS	( 515 )	A	NZ	D=	5.41	(B-S)
262	GLU	( 315 )	A	CB	<>	462	LYS	( 515 )	A	CG	D=	8.01	(S-S)
262	GLU	( 315 )	A	CB	<>	462	LYS	( 515 )	A	CD	D=	6.80	(S-S)
262	GLU	( 315 )	A	CB	<>	462	LYS	( 515 )	A	CE	D=	5.69	(S-S)
262	GLU	( 315 )	A	CB	<>	462	LYS	( 515 )	A	NZ	D=	4.53	(S-S)
262	GLU	( 315 )	A	CG	<>	462	LYS	( 515 )	A	CA	D=	7.89	(S-B)

262	GLU	(	315	)	A	CG	<>	462	LYS	(	515	)	A	C	D=	8.27	(S-B)
262	GLU	(	315	)	A	CG	<>	462	LYS	(	515	)	A	CB	D=	7.97	(S-S)
262	GLU	(	315	)	A	CG	<>	462	LYS	(	515	)	A	CG	D=	6.85	(S-S)
262	GLU	(	315	)	A	CG	<>	462	LYS	(	515	)	A	CD	D=	5.81	(S-S)
262	GLU	(	315	)	A	CG	<>	462	LYS	(	515	)	A	CE	D=	4.60	(S-S)
262	GLU	(	315	)	A	CG	<>	462	LYS	(	515	)	A	NZ	D=	3.72	(S-S)
262	GLU	(	315	)	A	CD	<>	462	LYS	(	515	)	A	CA	D=	8.30	(S-B)
262	GLU	(	315	)	A	CD	<>	462	LYS	(	515	)	A	CB	D=	8.14	(S-S)
262	GLU	(	315	)	A	CD	<>	462	LYS	(	515	)	A	CG	D=	6.84	(S-S)
262	GLU	(	315	)	A	CD	<>	462	LYS	(	515	)	A	CD	D=	5.90	(S-S)
262	GLU	(	315	)	A	CD	<>	462	LYS	(	515	)	A	CE	D=	4.48	(S-S)
262	GLU	(	315	)	A	CD	<>	462	LYS	(	515	)	A	NZ	D=	3.80	(S-S)
262	GLU	(	315	)	A	OE1	<>	462	LYS	(	515	)	A	CG	D=	7.94	(S-S)
262	GLU	(	315	)	A	OE1	<>	462	LYS	(	515	)	A	CD	D=	7.08	(S-S)
262	GLU	(	315	)	A	OE1	<>	462	LYS	(	515	)	A	CE	D=	5.63	(S-S)
262	GLU	(	315	)	A	OE1	<>	462	LYS	(	515	)	A	NZ	D=	5.01	(S-S)
262	GLU	(	315	)	A	OE2	<>	462	LYS	(	515	)	A	CA	D=	7.67	(S-B)
262	GLU	(	315	)	A	OE2	<>	462	LYS	(	515	)	A	C	D=	8.07	(S-B)
262	GLU	(	315	)	A	OE2	<>	462	LYS	(	515	)	A	CB	D=	7.31	(S-S)
262	GLU	(	315	)	A	OE2	<>	462	LYS	(	515	)	A	CG	D=	5.93	(S-S)
262	GLU	(	315	)	A	OE2	<>	462	LYS	(	515	)	A	CD	D=	5.02	(S-S)
262	GLU	(	315	)	A	OE2	<>	462	LYS	(	515	)	A	CE	D=	3.54	(S-S)
262	GLU	(	315	)	A	OE2	<>	462	LYS	(	515	)	A	NZ	D=	3.01	(S-S)
262	GLU	(	315	)	A	N	<>	466	ARG	(	519	)	A	N	D=	8.09	(B-B)
262	GLU	(	315	)	A	N	<>	466	ARG	(	519	)	A	CA	D=	6.92	(B-B)
262	GLU	(	315	)	A	N	<>	466	ARG	(	519	)	A	C	D=	7.59	(B-B)
262	GLU	(	315	)	A	N	<>	466	ARG	(	519	)	A	CB	D=	6.33	(B-S)
262	GLU	(	315	)	A	N	<>	466	ARG	(	519	)	A	CG	D=	7.47	(B-S)
262	GLU	(	315	)	A	N	<>	466	ARG	(	519	)	A	CD	D=	7.37	(B-S)
262	GLU	(	315	)	A	CA	<>	466	ARG	(	519	)	A	N	D=	7.79	(B-B)
262	GLU	(	315	)	A	CA	<>	466	ARG	(	519	)	A	CA	D=	6.50	(B-B)
262	GLU	(	315	)	A	CA	<>	466	ARG	(	519	)	A	C	D=	6.90	(B-B)
262	GLU	(	315	)	A	CA	<>	466	ARG	(	519	)	A	O	D=	8.10	(B-B)
262	GLU	(	315	)	A	CA	<>	466	ARG	(	519	)	A	CB	D=	6.11	(B-S)
262	GLU	(	315	)	A	CA	<>	466	ARG	(	519	)	A	CG	D=	7.27	(B-S)
262	GLU	(	315	)	A	CA	<>	466	ARG	(	519	)	A	CD	D=	7.38	(B-S)
262	GLU	(	315	)	A	C	<>	466	ARG	(	519	)	A	N	D=	6.97	(B-B)
262	GLU	(	315	)	A	C	<>	466	ARG	(	519	)	A	CA	D=	5.77	(B-B)
262	GLU	(	315	)	A	C	<>	466	ARG	(	519	)	A	C	D=	6.24	(B-B)
262	GLU	(	315	)	A	C	<>	466	ARG	(	519	)	A	O	D=	7.47	(B-B)
262	GLU	(	315	)	A	C	<>	466	ARG	(	519	)	A	CB	D=	5.69	(B-S)
262	GLU	(	315	)	A	C	<>	466	ARG	(	519	)	A	CG	D=	7.04	(B-S)
262	GLU	(	315	)	A	C	<>	466	ARG	(	519	)	A	CD	D=	7.41	(B-S)
262	GLU	(	315	)	A	O	<>	466	ARG	(	519	)	A	N	D=	6.49	(B-B)
262	GLU	(	315	)	A	O	<>	466	ARG	(	519	)	A	CA	D=	5.46	(B-B)
262	GLU	(	315	)	A	O	<>	466	ARG	(	519	)	A	C	D=	6.21	(B-B)
262	GLU	(	315	)	A	O	<>	466	ARG	(	519	)	A	O	D=	7.44	(B-B)
262	GLU	(	315	)	A	O	<>	466	ARG	(	519	)	A	CB	D=	5.38	(B-S)
262	GLU	(	315	)	A	O	<>	466	ARG	(	519	)	A	CG	D=	6.81	(B-S)
262	GLU	(	315	)	A	O	<>	466	ARG	(	519	)	A	CD	D=	7.16	(B-S)
262	GLU	(	315	)	A	CB	<>	466	ARG	(	519	)	A	N	D=	7.35	(S-B)
262	GLU	(	315	)	A	CB	<>	466	ARG	(	519	)	A	CA	D=	5.97	(S-B)
262	GLU	(	315	)	A	CB	<>	466	ARG	(	519	)	A	C	D=	6.18	(S-B)
262	GLU	(	315	)	A	CB	<>	466	ARG	(	519	)	A	O	D=	7.29	(S-B)
262	GLU	(	315	)	A	CB	<>	466	ARG	(	519	)	A	CB	D=	5.42	(S-S)
262	GLU	(	315	)	A	CB	<>	466	ARG	(	519	)	A	CG	D=	6.36	(S-S)
262	GLU	(	315	)	A	CB	<>	466	ARG	(	519	)	A	CD	D=	6.43	(S-S)

262	GLU	(	315	)	A	CB	<>	466	ARG	(	519	)	A	NE	D=	7.54	(S-S)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	N	D=	6.04	(S-B)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	CA	D=	4.69	(S-B)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	C	D=	5.03	(S-B)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	O	D=	6.11	(S-B)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	CB	D=	3.96	(S-S)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	CG	D=	4.87	(S-S)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	CD	D=	4.93	(S-S)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	NE	D=	6.10	(S-S)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	CZ	D=	7.36	(S-S)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	NH1	D=	8.33	(S-S)
262	GLU	(	315	)	A	CG	<>	466	ARG	(	519	)	A	NH2	D=	7.88	(S-S)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	N	D=	6.29	(S-B)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	CA	D=	4.95	(S-B)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	C	D=	5.04	(S-B)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	O	D=	5.92	(S-B)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	CB	D=	4.01	(S-S)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	CG	D=	4.44	(S-S)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	CD	D=	4.32	(S-S)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	NE	D=	5.22	(S-S)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	CZ	D=	6.54	(S-S)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	NH1	D=	7.34	(S-S)
262	GLU	(	315	)	A	CD	<>	466	ARG	(	519	)	A	NH2	D=	7.26	(S-S)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	N	D=	6.64	(S-B)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	CA	D=	5.25	(S-B)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	C	D=	4.97	(S-B)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	O	D=	5.73	(S-B)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	CB	D=	4.53	(S-S)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	CG	D=	4.81	(S-S)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	CD	D=	4.88	(S-S)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	NE	D=	5.58	(S-S)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	CZ	D=	6.90	(S-S)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	NH1	D=	7.57	(S-S)
262	GLU	(	315	)	A	OE1	<>	466	ARG	(	519	)	A	NH2	D=	7.74	(S-S)
262	GLU	(	315	)	A	OE2	<>	466	ARG	(	519	)	A	N	D=	6.58	(S-B)
262	GLU	(	315	)	A	OE2	<>	466	ARG	(	519	)	A	CA	D=	5.39	(S-B)
262	GLU	(	315	)	A	OE2	<>	466	ARG	(	519	)	A	C	D=	5.65	(S-B)
262	GLU	(	315	)	A	OE2	<>	466	ARG	(	519	)	A	O	D=	6.42	(S-B)
262	GLU	(	315	)	A	OE2	<>	466	ARG	(	519	)	A	CB	D=	4.16	(S-S)
262	GLU	(	315	)	A	OE2	<>	466	ARG	(	519	)	A	CG	D=	4.31	(S-S)
262	GLU	(	315	)	A	OE2	<>	466	ARG	(	519	)	A	CD	D=	3.77	(S-S)
262	GLU	(	315	)	A	OE2	<>	466	ARG	(	519	)	A	NE	D=	4.54	(S-S)
262	GLU	(	315	)	A	OE2	<>	466	ARG	(	519	)	A	CZ	D=	5.83	(S-S)
262	GLU	(	315	)	A	OE2	<>	466	ARG	(	519	)	A	NH1	D=	6.60	(S-S)
262	GLU	(	315	)	A	OE2	<>	466	ARG	(	519	)	A	NH2	D=	6.59	(S-S)
262	GLU	(	315	)	A	N	<>	493	GLU	(	546	)	A	CB	D=	8.39	(B-S)
262	GLU	(	315	)	A	N	<>	493	GLU	(	546	)	A	CG	D=	7.74	(B-S)
262	GLU	(	315	)	A	N	<>	493	GLU	(	546	)	A	CD	D=	6.27	(B-S)
262	GLU	(	315	)	A	N	<>	493	GLU	(	546	)	A	OE1	D=	6.10	(B-S)
262	GLU	(	315	)	A	N	<>	493	GLU	(	546	)	A	OE2	D=	5.47	(B-S)
262	GLU	(	315	)	A	CA	<>	493	GLU	(	546	)	A	CA	D=	8.41	(B-B)
262	GLU	(	315	)	A	CA	<>	493	GLU	(	546	)	A	CB	D=	7.01	(B-S)
262	GLU	(	315	)	A	CA	<>	493	GLU	(	546	)	A	CG	D=	6.37	(B-S)
262	GLU	(	315	)	A	CA	<>	493	GLU	(	546	)	A	CD	D=	4.93	(B-S)
262	GLU	(	315	)	A	CA	<>	493	GLU	(	546	)	A	OE1	D=	4.92	(B-S)
262	GLU	(	315	)	A	CA	<>	493	GLU	(	546	)	A	OE2	D=	4.07	(B-S)
262	GLU	(	315	)	A	C	<>	493	GLU	(	546	)	A	CA	D=	8.26	(B-B)

262	GLU ( 315 )A	C <>	493	GLU ( 546 )A	CB	D=	6.83	(B-S)
262	GLU ( 315 )A	C <>	493	GLU ( 546 )A	CG	D=	6.51	(B-S)
262	GLU ( 315 )A	C <>	493	GLU ( 546 )A	CD	D=	5.18	(B-S)
262	GLU ( 315 )A	C <>	493	GLU ( 546 )A	OE1	D=	5.23	(B-S)
262	GLU ( 315 )A	C <>	493	GLU ( 546 )A	OE2	D=	4.41	(B-S)
262	GLU ( 315 )A	O <>	493	GLU ( 546 )A	CB	D=	7.92	(B-S)
262	GLU ( 315 )A	O <>	493	GLU ( 546 )A	CG	D=	7.69	(B-S)
262	GLU ( 315 )A	O <>	493	GLU ( 546 )A	CD	D=	6.39	(B-S)
262	GLU ( 315 )A	O <>	493	GLU ( 546 )A	OE1	D=	6.40	(B-S)
262	GLU ( 315 )A	O <>	493	GLU ( 546 )A	OE2	D=	5.64	(B-S)
262	GLU ( 315 )A	CB <>	493	GLU ( 546 )A	CA	D=	8.54	(S-B)
262	GLU ( 315 )A	CB <>	493	GLU ( 546 )A	CB	D=	7.09	(S-S)
262	GLU ( 315 )A	CB <>	493	GLU ( 546 )A	CG	D=	6.26	(S-S)
262	GLU ( 315 )A	CB <>	493	GLU ( 546 )A	CD	D=	4.96	(S-S)
262	GLU ( 315 )A	CB <>	493	GLU ( 546 )A	OE1	D=	5.26	(S-S)
262	GLU ( 315 )A	CB <>	493	GLU ( 546 )A	OE2	D=	3.85	(S-S)
262	GLU ( 315 )A	CG <>	493	GLU ( 546 )A	CB	D=	8.09	(S-S)
262	GLU ( 315 )A	CG <>	493	GLU ( 546 )A	CG	D=	7.36	(S-S)
262	GLU ( 315 )A	CG <>	493	GLU ( 546 )A	CD	D=	6.18	(S-S)
262	GLU ( 315 )A	CG <>	493	GLU ( 546 )A	OE1	D=	6.62	(S-S)
262	GLU ( 315 )A	CG <>	493	GLU ( 546 )A	OE2	D=	5.00	(S-S)
262	GLU ( 315 )A	CD <>	493	GLU ( 546 )A	CG	D=	7.79	(S-S)
262	GLU ( 315 )A	CD <>	493	GLU ( 546 )A	CD	D=	6.76	(S-S)
262	GLU ( 315 )A	CD <>	493	GLU ( 546 )A	OE1	D=	7.36	(S-S)
262	GLU ( 315 )A	CD <>	493	GLU ( 546 )A	OE2	D=	5.52	(S-S)
262	GLU ( 315 )A	OE1 <>	493	GLU ( 546 )A	CB	D=	8.11	(S-S)
262	GLU ( 315 )A	OE1 <>	493	GLU ( 546 )A	CG	D=	7.18	(S-S)
262	GLU ( 315 )A	OE1 <>	493	GLU ( 546 )A	CD	D=	6.34	(S-S)
262	GLU ( 315 )A	OE1 <>	493	GLU ( 546 )A	OE1	D=	7.11	(S-S)
262	GLU ( 315 )A	OE1 <>	493	GLU ( 546 )A	OE2	D=	5.10	(S-S)
262	GLU ( 315 )A	OE2 <>	493	GLU ( 546 )A	CD	D=	7.89	(S-S)
262	GLU ( 315 )A	OE2 <>	493	GLU ( 546 )A	OE2	D=	6.66	(S-S)

### Salt bridges WT dog POR

179	262	GLU ( 315 )A	OE1 -	410	LYS ( 463 )A	NZ	5.96
180	262	GLU ( 315 )A	OE1 -	462	LYS ( 515 )A	NZ	5.01
181	262	GLU ( 315 )A	OE2 -	462	LYS ( 515 )A	NZ	3.01
182	262	GLU ( 315 )A	OE1 -	466	ARG ( 519 )A	NE	5.58
183	262	GLU ( 315 )A	OE2 -	466	ARG ( 519 )A	NH1	6.60
184	262	GLU ( 315 )A	OE2 -	466	ARG ( 519 )A	NH2	6.59
185	262	GLU ( 315 )A	OE2 -	466	ARG ( 519 )A	NE	4.54

1	13	ASP ( 66 )A	OD1 -	19	LYS ( 72 )A	NZ	4.39
2	13	ASP ( 66 )A	OD2 -	19	LYS ( 72 )A	NZ	2.91
3	18	GLU ( 71 )A	OE2 -	21	LYS ( 74 )A	NZ	5.60
4	18	GLU ( 71 )A	OE1 -	22	LYS ( 75 )A	NZ	6.59
5	39	GLU ( 92 )A	OE1 -	304	LYS ( 357 )A	NZ	4.71
6	39	GLU ( 92 )A	OE2 -	304	LYS ( 357 )A	NZ	2.89

7	39	GLU	(	92	)	A	OE1	-	397	ARG	(	450	)	A	NH1	2.87
8	39	GLU	(	92	)	A	OE1	-	397	ARG	(	450	)	A	NH2	3.41
9	39	GLU	(	92	)	A	OE1	-	397	ARG	(	450	)	A	NE	4.86
10	39	GLU	(	92	)	A	OE2	-	397	ARG	(	450	)	A	NH1	3.97
11	39	GLU	(	92	)	A	OE2	-	397	ARG	(	450	)	A	NH2	3.55
12	39	GLU	(	92	)	A	OE2	-	397	ARG	(	450	)	A	NE	5.29
13	40	GLU	(	93	)	A	OE1	-	329	ARG	(	382	)	A	NH1	6.87
14	40	GLU	(	93	)	A	OE1	-	329	ARG	(	382	)	A	NE	6.35
15	40	GLU	(	93	)	A	OE2	-	329	ARG	(	382	)	A	NH1	5.62
16	40	GLU	(	93	)	A	OE2	-	329	ARG	(	382	)	A	NE	5.83
17	40	GLU	(	93	)	A	OE1	-	397	ARG	(	450	)	A	NH1	5.85
18	40	GLU	(	93	)	A	OE1	-	397	ARG	(	450	)	A	NH2	6.64
19	40	GLU	(	93	)	A	OE1	-	397	ARG	(	450	)	A	NE	4.73
20	40	GLU	(	93	)	A	OE2	-	397	ARG	(	450	)	A	NH1	4.83
21	40	GLU	(	93	)	A	OE2	-	397	ARG	(	450	)	A	NH2	6.12
22	40	GLU	(	93	)	A	OE2	-	397	ARG	(	450	)	A	NE	3.98
23	48	ASP	(	101	)	A	OD1	-	51	ARG	(	104	)	A	NH1	6.31
24	48	ASP	(	101	)	A	OD1	-	51	ARG	(	104	)	A	NH2	5.37
25	48	ASP	(	101	)	A	OD1	-	51	ARG	(	104	)	A	NE	5.39
26	48	ASP	(	101	)	A	OD1	-	167	ARG	(	220	)	A	NH1	5.52
27	48	ASP	(	101	)	A	OD1	-	167	ARG	(	220	)	A	NH2	3.66
28	48	ASP	(	101	)	A	OD1	-	167	ARG	(	220	)	A	NE	5.15
29	48	ASP	(	101	)	A	OD2	-	167	ARG	(	220	)	A	NH1	5.05
30	48	ASP	(	101	)	A	OD2	-	167	ARG	(	220	)	A	NH2	2.93
31	48	ASP	(	101	)	A	OD2	-	167	ARG	(	220	)	A	NE	4.07
32	60	ASP	(	113	)	A	OD2	-	226	LYS	(	279	)	A	NZ	6.62
33	60	ASP	(	113	)	A	OD2	-	304	LYS	(	357	)	A	NZ	6.21
34	62	GLU	(	115	)	A	OE1	-	226	LYS	(	279	)	A	NZ	6.18
35	62	GLU	(	115	)	A	OE2	-	226	LYS	(	279	)	A	NZ	4.46
36	63	GLU	(	116	)	A	OE2	-	226	LYS	(	279	)	A	NZ	6.02
37	63	GLU	(	116	)	A	OE1	-	304	LYS	(	357	)	A	NZ	6.35
38	65	ASP	(	118	)	A	OD1	-	12	LYS	(	65	)	A	NZ	6.24
39	74	GLU	(	127	)	A	OE1	-	21	LYS	(	74	)	A	NZ	2.93
40	74	GLU	(	127	)	A	OE2	-	21	LYS	(	74	)	A	NZ	4.83
41	89	GLU	(	142	)	A	OE1	-	127	HIS	(	180	)	A	ND1	5.44
42	89	GLU	(	142	)	A	OE1	-	127	HIS	(	180	)	A	NE2	3.84
43	89	GLU	(	142	)	A	OE2	-	127	HIS	(	180	)	A	NE2	5.27
44	91	ASP	(	144	)	A	OD1	-	461	ARG	(	514	)	A	NH1	5.69
45	91	ASP	(	144	)	A	OD1	-	461	ARG	(	514	)	A	NH2	4.92
46	91	ASP	(	144	)	A	OD2	-	461	ARG	(	514	)	A	NH1	3.75
47	91	ASP	(	144	)	A	OD2	-	461	ARG	(	514	)	A	NH2	2.94
48	91	ASP	(	144	)	A	OD2	-	461	ARG	(	514	)	A	NE	5.07
49	91	ASP	(	144	)	A	OD1	-	466	ARG	(	519	)	A	NH2	6.98
50	94	ASP	(	147	)	A	OD1	-	461	ARG	(	514	)	A	NH1	3.85
51	94	ASP	(	147	)	A	OD1	-	461	ARG	(	514	)	A	NH2	4.34
52	94	ASP	(	147	)	A	OD1	-	461	ARG	(	514	)	A	NE	3.64
53	94	ASP	(	147	)	A	OD2	-	461	ARG	(	514	)	A	NH1	4.06
54	94	ASP	(	147	)	A	OD2	-	461	ARG	(	514	)	A	NH2	4.92
55	94	ASP	(	147	)	A	OD2	-	461	ARG	(	514	)	A	NE	3.16
56	98	ASP	(	151	)	A	OD1	-	12	LYS	(	65	)	A	NZ	4.47
57	98	ASP	(	151	)	A	OD2	-	12	LYS	(	65	)	A	NZ	2.87
58	126	GLU	(	179	)	A	OE2	-	127	HIS	(	180	)	A	ND1	6.93
59	126	GLU	(	179	)	A	OE1	-	585	ARG	(	638	)	A	NH1	4.40
60	126	GLU	(	179	)	A	OE1	-	585	ARG	(	638	)	A	NH2	3.07
61	126	GLU	(	179	)	A	OE1	-	585	ARG	(	638	)	A	NE	5.37
62	126	GLU	(	179	)	A	OE2	-	585	ARG	(	638	)	A	NH1	5.27
63	126	GLU	(	179	)	A	OE2	-	585	ARG	(	638	)	A	NH2	4.75

64	126	GLU	( 179 )	A	OE2 -	585	ARG	( 638 )	A	NE	6.86
65	126	GLU	( 179 )	A	OE1 -	611	LYS	( 664 )	A	NZ	4.68
66	126	GLU	( 179 )	A	OE2 -	611	LYS	( 664 )	A	NZ	3.94
67	136	ASP	( 189 )	A	OD1 -	146	ARG	( 199 )	A	NH1	4.97
68	136	ASP	( 189 )	A	OD1 -	146	ARG	( 199 )	A	NH2	2.93
69	136	ASP	( 189 )	A	OD1 -	146	ARG	( 199 )	A	NE	3.86
70	136	ASP	( 189 )	A	OD2 -	146	ARG	( 199 )	A	NH1	4.94
71	136	ASP	( 189 )	A	OD2 -	146	ARG	( 199 )	A	NH2	3.28
72	136	ASP	( 189 )	A	OD2 -	146	ARG	( 199 )	A	NE	4.52
73	140	GLU	( 193 )	A	OE2 -	137	LYS	( 190 )	A	NZ	5.14
74	140	GLU	( 193 )	A	OE1 -	146	ARG	( 199 )	A	NH1	4.01
75	140	GLU	( 193 )	A	OE1 -	146	ARG	( 199 )	A	NH2	4.00
76	140	GLU	( 193 )	A	OE1 -	146	ARG	( 199 )	A	NE	4.86
77	140	GLU	( 193 )	A	OE2 -	146	ARG	( 199 )	A	NH1	4.39
78	140	GLU	( 193 )	A	OE2 -	146	ARG	( 199 )	A	NH2	3.77
79	140	GLU	( 193 )	A	OE2 -	146	ARG	( 199 )	A	NE	5.54
80	149	GLU	( 202 )	A	OE1 -	146	ARG	( 199 )	A	NH1	3.01
81	149	GLU	( 202 )	A	OE1 -	146	ARG	( 199 )	A	NH2	4.49
82	149	GLU	( 202 )	A	OE1 -	146	ARG	( 199 )	A	NE	3.40
83	149	GLU	( 202 )	A	OE2 -	146	ARG	( 199 )	A	NH1	3.16
84	149	GLU	( 202 )	A	OE2 -	146	ARG	( 199 )	A	NH2	4.75
85	149	GLU	( 202 )	A	OE2 -	146	ARG	( 199 )	A	NE	2.88
86	154	ASP	( 207 )	A	OD1 -	123	LYS	( 176 )	A	NZ	6.06
87	154	ASP	( 207 )	A	OD2 -	123	LYS	( 176 )	A	NZ	4.78
88	155	ASP	( 208 )	A	OD1 -	581	ARG	( 634 )	A	NH1	6.82
89	156	ASP	( 209 )	A	OD1 -	581	ARG	( 634 )	A	NH1	4.82
90	156	ASP	( 209 )	A	OD1 -	581	ARG	( 634 )	A	NH2	3.07
91	156	ASP	( 209 )	A	OD1 -	581	ARG	( 634 )	A	NE	4.61
92	156	ASP	( 209 )	A	OD2 -	581	ARG	( 634 )	A	NH1	6.82
93	156	ASP	( 209 )	A	OD2 -	581	ARG	( 634 )	A	NH2	4.92
94	156	ASP	( 209 )	A	OD2 -	581	ARG	( 634 )	A	NE	6.68
95	160	GLU	( 213 )	A	OE1 -	44	ARG	( 97 )	A	NH1	2.88
96	160	GLU	( 213 )	A	OE1 -	44	ARG	( 97 )	A	NH2	3.29
97	160	GLU	( 213 )	A	OE1 -	44	ARG	( 97 )	A	NE	4.83
98	160	GLU	( 213 )	A	OE2 -	44	ARG	( 97 )	A	NH1	3.50
99	160	GLU	( 213 )	A	OE2 -	44	ARG	( 97 )	A	NH2	2.86
100	160	GLU	( 213 )	A	OE2 -	44	ARG	( 97 )	A	NE	4.87
101	160	GLU	( 213 )	A	OE1 -	329	ARG	( 382 )	A	NH1	5.74
102	160	GLU	( 213 )	A	OE1 -	329	ARG	( 382 )	A	NH2	4.81
103	160	GLU	( 213 )	A	OE1 -	329	ARG	( 382 )	A	NE	4.23
104	160	GLU	( 213 )	A	OE2 -	329	ARG	( 382 )	A	NH2	6.30
105	160	GLU	( 213 )	A	OE2 -	329	ARG	( 382 )	A	NE	5.58
106	161	GLU	( 214 )	A	OE1 -	360	LYS	( 413 )	A	NZ	3.91
107	161	GLU	( 214 )	A	OE2 -	360	LYS	( 413 )	A	NZ	5.51
108	162	ASP	( 215 )	A	OD1 -	360	LYS	( 413 )	A	NZ	6.94
109	168	GLU	( 221 )	A	OE1 -	167	ARG	( 220 )	A	NH1	4.86
110	168	GLU	( 221 )	A	OE1 -	167	ARG	( 220 )	A	NH2	6.81
111	168	GLU	( 221 )	A	OE1 -	167	ARG	( 220 )	A	NE	6.17
112	168	GLU	( 221 )	A	OE2 -	167	ARG	( 220 )	A	NH1	4.02
113	168	GLU	( 221 )	A	OE2 -	167	ARG	( 220 )	A	NH2	6.13
114	168	GLU	( 221 )	A	OE2 -	167	ARG	( 220 )	A	NE	4.93
115	185	GLU	( 238 )	A	OE1 -	50	HIS	( 103 )	A	ND1	2.77
116	185	GLU	( 238 )	A	OE1 -	50	HIS	( 103 )	A	NE2	4.79
117	185	GLU	( 238 )	A	OE2 -	50	HIS	( 103 )	A	ND1	3.39
118	185	GLU	( 238 )	A	OE2 -	50	HIS	( 103 )	A	NE2	4.70
119	185	GLU	( 238 )	A	OE1 -	51	ARG	( 104 )	A	NH1	6.07
120	185	GLU	( 238 )	A	OE1 -	51	ARG	( 104 )	A	NH2	6.02



121	185	GLU	( 238 )	A	OE1	-	51	ARG	( 104 )	A	NE	4.15
122	185	GLU	( 238 )	A	OE2	-	51	ARG	( 104 )	A	NE	5.65
123	185	GLU	( 238 )	A	OE1	-	55	ARG	( 108 )	A	NH1	6.59
124	185	GLU	( 238 )	A	OE1	-	55	ARG	( 108 )	A	NH2	5.97
125	185	GLU	( 238 )	A	OE2	-	55	ARG	( 108 )	A	NH1	6.57
126	185	GLU	( 238 )	A	OE2	-	55	ARG	( 108 )	A	NH2	6.69
127	186	GLU	( 239 )	A	OE1	-	350	ARG	( 403 )	A	NH1	6.72
128	186	GLU	( 239 )	A	OE1	-	350	ARG	( 403 )	A	NH2	6.20
129	186	GLU	( 239 )	A	OE1	-	350	ARG	( 403 )	A	NE	6.76
130	186	GLU	( 239 )	A	OE2	-	350	ARG	( 403 )	A	NH1	6.94
131	186	GLU	( 239 )	A	OE2	-	350	ARG	( 403 )	A	NH2	5.96
132	186	GLU	( 239 )	A	OE2	-	350	ARG	( 403 )	A	NE	6.29
133	193	GLU	( 246 )	A	OE2	-	190	ARG	( 243 )	A	NH1	6.85
134	193	GLU	( 246 )	A	OE2	-	190	ARG	( 243 )	A	NH2	6.81
135	199	ASP	( 252 )	A	OD1	-	197	HIS	( 250 )	A	ND1	6.79
136	201	ASP	( 254 )	A	OD2	-	204	LYS	( 257 )	A	NZ	6.31
137	209	GLU	( 262 )	A	OE1	-	214	LYS	( 267 )	A	NZ	4.87
138	209	GLU	( 262 )	A	OE2	-	214	LYS	( 267 )	A	NZ	4.44
139	217	GLU	( 270 )	A	OE1	-	214	LYS	( 267 )	A	NZ	6.16
140	217	GLU	( 270 )	A	OE2	-	214	LYS	( 267 )	A	NZ	6.54
141	224	ASP	( 277 )	A	OD1	-	212	ARG	( 265 )	A	NH1	6.23
142	224	ASP	( 277 )	A	OD1	-	212	ARG	( 265 )	A	NH2	6.75
143	224	ASP	( 277 )	A	OD1	-	212	ARG	( 265 )	A	NE	6.16
144	224	ASP	( 277 )	A	OD2	-	226	LYS	( 279 )	A	NZ	6.01
145	244	GLU	( 297 )	A	OE1	-	245	ARG	( 298 )	A	NH1	6.69
146	244	GLU	( 297 )	A	OE1	-	245	ARG	( 298 )	A	NE	5.45
147	244	GLU	( 297 )	A	OE1	-	514	ARG	( 567 )	A	NH1	5.05
148	244	GLU	( 297 )	A	OE1	-	514	ARG	( 567 )	A	NH2	2.88
149	244	GLU	( 297 )	A	OE1	-	514	ARG	( 567 )	A	NE	4.21
150	244	GLU	( 297 )	A	OE2	-	514	ARG	( 567 )	A	NH1	6.21
151	244	GLU	( 297 )	A	OE2	-	514	ARG	( 567 )	A	NH2	4.03
152	244	GLU	( 297 )	A	OE2	-	514	ARG	( 567 )	A	NE	5.73
153	244	GLU	( 297 )	A	OE1	-	515	ARG	( 568 )	A	NH1	5.07
154	244	GLU	( 297 )	A	OE1	-	515	ARG	( 568 )	A	NH2	6.47
155	244	GLU	( 297 )	A	OE1	-	515	ARG	( 568 )	A	NE	6.49
156	244	GLU	( 297 )	A	OE2	-	515	ARG	( 568 )	A	NH1	5.18
157	244	GLU	( 297 )	A	OE2	-	515	ARG	( 568 )	A	NH2	6.53
158	244	GLU	( 297 )	A	OE1	-	544	ARG	( 597 )	A	NH1	5.50
159	244	GLU	( 297 )	A	OE1	-	544	ARG	( 597 )	A	NH2	4.33
160	244	GLU	( 297 )	A	OE1	-	544	ARG	( 597 )	A	NE	5.64
161	244	GLU	( 297 )	A	OE2	-	544	ARG	( 597 )	A	NH1	5.67
162	244	GLU	( 297 )	A	OE2	-	544	ARG	( 597 )	A	NH2	3.98
163	244	GLU	( 297 )	A	OE2	-	544	ARG	( 597 )	A	NE	5.94
164	251	GLU	( 304 )	A	OE1	-	249	HIS	( 302 )	A	ND1	6.92
165	251	GLU	( 304 )	A	OE1	-	249	HIS	( 302 )	A	NE2	4.81
166	251	GLU	( 304 )	A	OE2	-	249	HIS	( 302 )	A	ND1	5.02
167	251	GLU	( 304 )	A	OE2	-	249	HIS	( 302 )	A	NE2	2.88
168	251	GLU	( 304 )	A	OE1	-	412	HIS	( 465 )	A	ND1	6.27
169	251	GLU	( 304 )	A	OE2	-	412	HIS	( 465 )	A	ND1	6.42
170	251	GLU	( 304 )	A	OE2	-	412	HIS	( 465 )	A	NE2	6.51
171	251	GLU	( 304 )	A	OE1	-	417	HIS	( 470 )	A	ND1	5.42
172	251	GLU	( 304 )	A	OE1	-	417	HIS	( 470 )	A	NE2	3.99
173	251	GLU	( 304 )	A	OE2	-	417	HIS	( 470 )	A	ND1	4.16
174	251	GLU	( 304 )	A	OE2	-	417	HIS	( 470 )	A	NE2	3.66
175	253	ASP	( 306 )	A	OD2	-	453	ARG	( 506 )	A	NH1	5.82
176	253	ASP	( 306 )	A	OD2	-	453	ARG	( 506 )	A	NH2	5.31
177	256	ASP	( 309 )	A	OD1	-	258	LYS	( 311 )	A	NZ	4.66

178	256	ASP	( 309 )	A	OD2 -	258	LYS	( 311 )	A	NZ	6.46
179	262	GLU	( 315 )	A	OE1 -	410	LYS	( 463 )	A	NZ	5.96
180	262	GLU	( 315 )	A	OE1 -	462	LYS	( 515 )	A	NZ	5.01
181	262	GLU	( 315 )	A	OE2 -	462	LYS	( 515 )	A	NZ	3.01
182	262	GLU	( 315 )	A	OE1 -	466	ARG	( 519 )	A	NE	5.58
183	262	GLU	( 315 )	A	OE2 -	466	ARG	( 519 )	A	NH1	6.60
184	262	GLU	( 315 )	A	OE2 -	466	ARG	( 519 )	A	NH2	6.59
185	262	GLU	( 315 )	A	OE2 -	466	ARG	( 519 )	A	NE	4.54
186	265	ASP	( 318 )	A	OD1 -	266	HIS	( 319 )	A	ND1	6.33
187	265	ASP	( 318 )	A	OD1 -	462	LYS	( 515 )	A	NZ	3.58
188	265	ASP	( 318 )	A	OD2 -	462	LYS	( 515 )	A	NZ	2.88
189	265	ASP	( 318 )	A	OD1 -	466	ARG	( 519 )	A	NH2	6.49
190	265	ASP	( 318 )	A	OD1 -	466	ARG	( 519 )	A	NE	6.08
191	274	ASP	( 327 )	A	OD2 -	434	LYS	( 487 )	A	NZ	6.59
192	288	ASP	( 341 )	A	OD1 -	315	ARG	( 368 )	A	NH1	6.01
193	290	ASP	( 343 )	A	OD1 -	315	ARG	( 368 )	A	NH1	3.59
194	290	ASP	( 343 )	A	OD1 -	315	ARG	( 368 )	A	NH2	4.99
195	290	ASP	( 343 )	A	OD1 -	315	ARG	( 368 )	A	NE	2.89
196	290	ASP	( 343 )	A	OD2 -	315	ARG	( 368 )	A	NH1	2.90
197	290	ASP	( 343 )	A	OD2 -	315	ARG	( 368 )	A	NH2	4.99
198	290	ASP	( 343 )	A	OD2 -	315	ARG	( 368 )	A	NE	3.70
199	299	ASP	( 352 )	A	OD1 -	25	ARG	( 78 )	A	NH1	3.01
200	299	ASP	( 352 )	A	OD1 -	25	ARG	( 78 )	A	NH2	3.29
201	299	ASP	( 352 )	A	OD1 -	25	ARG	( 78 )	A	NE	4.93
202	299	ASP	( 352 )	A	OD2 -	25	ARG	( 78 )	A	NH1	3.41
203	299	ASP	( 352 )	A	OD2 -	25	ARG	( 78 )	A	NH2	2.92
204	299	ASP	( 352 )	A	OD2 -	25	ARG	( 78 )	A	NE	4.71
205	301	GLU	( 354 )	A	OE1 -	19	LYS	( 72 )	A	NZ	5.20
206	301	GLU	( 354 )	A	OE1 -	22	LYS	( 75 )	A	NZ	4.65
207	301	GLU	( 354 )	A	OE2 -	22	LYS	( 75 )	A	NZ	4.96
208	301	GLU	( 354 )	A	OE1 -	25	ARG	( 78 )	A	NH2	6.86
209	323	ASP	( 376 )	A	OD2 -	329	ARG	( 382 )	A	NH1	6.73
210	323	ASP	( 376 )	A	OD1 -	401	ARG	( 454 )	A	NH1	4.45
211	323	ASP	( 376 )	A	OD1 -	401	ARG	( 454 )	A	NH2	5.65
212	323	ASP	( 376 )	A	OD1 -	401	ARG	( 454 )	A	NE	6.70
213	323	ASP	( 376 )	A	OD2 -	401	ARG	( 454 )	A	NH1	3.44
214	323	ASP	( 376 )	A	OD2 -	401	ARG	( 454 )	A	NH2	4.07
215	323	ASP	( 376 )	A	OD2 -	401	ARG	( 454 )	A	NE	5.46
216	335	GLU	( 388 )	A	OE1 -	47	LYS	( 100 )	A	NZ	3.25
217	335	GLU	( 388 )	A	OE2 -	47	LYS	( 100 )	A	NZ	5.01
218	335	GLU	( 388 )	A	OE1 -	51	ARG	( 104 )	A	NH1	2.88
219	335	GLU	( 388 )	A	OE1 -	51	ARG	( 104 )	A	NH2	3.89
220	335	GLU	( 388 )	A	OE1 -	51	ARG	( 104 )	A	NE	5.05
221	335	GLU	( 388 )	A	OE2 -	51	ARG	( 104 )	A	NH1	3.32
222	335	GLU	( 388 )	A	OE2 -	51	ARG	( 104 )	A	NH2	2.88
223	335	GLU	( 388 )	A	OE2 -	51	ARG	( 104 )	A	NE	4.86
224	335	GLU	( 388 )	A	OE2 -	350	ARG	( 403 )	A	NH2	6.40
225	335	GLU	( 388 )	A	OE1 -	390	HIS	( 443 )	A	NE2	5.30
226	345	GLU	( 398 )	A	OE2 -	385	ARG	( 438 )	A	NH2	6.73
227	347	GLU	( 400 )	A	OE1 -	350	ARG	( 403 )	A	NE	6.99
228	347	GLU	( 400 )	A	OE2 -	350	ARG	( 403 )	A	NH1	6.92
229	347	GLU	( 400 )	A	OE2 -	350	ARG	( 403 )	A	NE	6.26
230	347	GLU	( 400 )	A	OE1 -	351	LYS	( 404 )	A	NZ	4.38
231	347	GLU	( 400 )	A	OE2 -	351	LYS	( 404 )	A	NZ	6.44
232	358	GLU	( 411 )	A	OE1 -	348	HIS	( 401 )	A	NE2	5.89
233	358	GLU	( 411 )	A	OE1 -	351	LYS	( 404 )	A	NZ	2.96
234	358	GLU	( 411 )	A	OE2 -	351	LYS	( 404 )	A	NZ	4.46

235	361	GLU	(	414	)	A	OE2	-	360	LYS	(	413	)	A	NZ	6.50
236	369	GLU	(	422	)	A	OE1	-	371	ARG	(	424	)	A	NH1	4.86
237	369	GLU	(	422	)	A	OE1	-	371	ARG	(	424	)	A	NH2	4.20
238	369	GLU	(	422	)	A	OE1	-	371	ARG	(	424	)	A	NE	5.93
239	369	GLU	(	422	)	A	OE2	-	371	ARG	(	424	)	A	NH1	6.38
240	369	GLU	(	422	)	A	OE2	-	371	ARG	(	424	)	A	NH2	5.56
241	369	GLU	(	422	)	A	OE1	-	428	ARG	(	481	)	A	NH1	3.75
242	369	GLU	(	422	)	A	OE1	-	428	ARG	(	481	)	A	NH2	5.59
243	369	GLU	(	422	)	A	OE1	-	428	ARG	(	481	)	A	NE	4.51
244	369	GLU	(	422	)	A	OE2	-	428	ARG	(	481	)	A	NH1	5.21
245	369	GLU	(	422	)	A	OE2	-	428	ARG	(	481	)	A	NH2	6.77
246	369	GLU	(	422	)	A	OE2	-	428	ARG	(	481	)	A	NE	6.15
247	380	ASP	(	433	)	A	OD1	-	372	ARG	(	425	)	A	NH1	5.06
248	380	ASP	(	433	)	A	OD1	-	372	ARG	(	425	)	A	NH2	6.77
249	380	ASP	(	433	)	A	OD1	-	372	ARG	(	425	)	A	NE	4.88
250	380	ASP	(	433	)	A	OD2	-	372	ARG	(	425	)	A	NH1	3.56
251	380	ASP	(	433	)	A	OD2	-	372	ARG	(	425	)	A	NH2	4.92
252	380	ASP	(	433	)	A	OD2	-	372	ARG	(	425	)	A	NE	2.81
253	380	ASP	(	433	)	A	OD1	-	431	ARG	(	484	)	A	NH1	2.95
254	380	ASP	(	433	)	A	OD1	-	431	ARG	(	484	)	A	NH2	3.86
255	380	ASP	(	433	)	A	OD1	-	431	ARG	(	484	)	A	NE	5.11
256	380	ASP	(	433	)	A	OD2	-	431	ARG	(	484	)	A	NH1	3.38
257	380	ASP	(	433	)	A	OD2	-	431	ARG	(	484	)	A	NH2	2.95
258	380	ASP	(	433	)	A	OD2	-	431	ARG	(	484	)	A	NE	4.94
259	389	ASP	(	442	)	A	OD1	-	190	ARG	(	243	)	A	NH1	3.10
260	389	ASP	(	442	)	A	OD1	-	190	ARG	(	243	)	A	NH2	4.07
261	389	ASP	(	442	)	A	OD1	-	190	ARG	(	243	)	A	NE	5.27
262	389	ASP	(	442	)	A	OD2	-	190	ARG	(	243	)	A	NH1	3.00
263	389	ASP	(	442	)	A	OD2	-	190	ARG	(	243	)	A	NH2	2.86
264	389	ASP	(	442	)	A	OD2	-	190	ARG	(	243	)	A	NE	4.57
265	389	ASP	(	442	)	A	OD1	-	390	HIS	(	443	)	A	ND1	6.12
266	389	ASP	(	442	)	A	OD2	-	390	HIS	(	443	)	A	ND1	6.66
267	393	GLU	(	446	)	A	OE1	-	47	LYS	(	100	)	A	NZ	6.50
268	393	GLU	(	446	)	A	OE2	-	47	LYS	(	100	)	A	NZ	5.01
269	393	GLU	(	446	)	A	OE1	-	190	ARG	(	243	)	A	NH1	5.02
270	393	GLU	(	446	)	A	OE1	-	190	ARG	(	243	)	A	NH2	2.94
271	393	GLU	(	446	)	A	OE1	-	190	ARG	(	243	)	A	NE	3.95
272	393	GLU	(	446	)	A	OE2	-	190	ARG	(	243	)	A	NH1	6.97
273	393	GLU	(	446	)	A	OE2	-	190	ARG	(	243	)	A	NH2	5.04
274	393	GLU	(	446	)	A	OE2	-	190	ARG	(	243	)	A	NE	5.46
275	393	GLU	(	446	)	A	OE1	-	390	HIS	(	443	)	A	ND1	6.14
276	393	GLU	(	446	)	A	OE1	-	390	HIS	(	443	)	A	NE2	5.22
277	393	GLU	(	446	)	A	OE2	-	390	HIS	(	443	)	A	NE2	5.77
278	424	GLU	(	477	)	A	OE1	-	434	LYS	(	487	)	A	NZ	3.10
279	424	GLU	(	477	)	A	OE2	-	434	LYS	(	487	)	A	NZ	4.46
280	424	GLU	(	477	)	A	OE1	-	442	ARG	(	495	)	A	NH1	2.89
281	424	GLU	(	477	)	A	OE1	-	442	ARG	(	495	)	A	NH2	3.54
282	424	GLU	(	477	)	A	OE1	-	442	ARG	(	495	)	A	NE	4.96
283	424	GLU	(	477	)	A	OE2	-	442	ARG	(	495	)	A	NH1	4.89
284	424	GLU	(	477	)	A	OE2	-	442	ARG	(	495	)	A	NH2	4.85
285	424	GLU	(	477	)	A	OE2	-	442	ARG	(	495	)	A	NE	6.73
286	445	GLU	(	498	)	A	OE1	-	452	ARG	(	505	)	A	NH1	5.63
287	445	GLU	(	498	)	A	OE1	-	452	ARG	(	505	)	A	NH2	5.69
288	445	GLU	(	498	)	A	OE1	-	452	ARG	(	505	)	A	NE	4.35
289	445	GLU	(	498	)	A	OE2	-	452	ARG	(	505	)	A	NH1	4.01
290	445	GLU	(	498	)	A	OE2	-	452	ARG	(	505	)	A	NH2	4.75
291	445	GLU	(	498	)	A	OE2	-	452	ARG	(	505	)	A	NE	3.57

292	449	GLU	( 502 )	A	OE1	-	452	ARG	( 505 )	A	NH1	4.29
293	449	GLU	( 502 )	A	OE1	-	452	ARG	( 505 )	A	NH2	4.66
294	449	GLU	( 502 )	A	OE1	-	452	ARG	( 505 )	A	NE	3.94
295	449	GLU	( 502 )	A	OE2	-	452	ARG	( 505 )	A	NH1	4.18
296	449	GLU	( 502 )	A	OE2	-	452	ARG	( 505 )	A	NH2	3.71
297	449	GLU	( 502 )	A	OE2	-	452	ARG	( 505 )	A	NE	4.16
298	493	GLU	( 546 )	A	OE1	-	410	LYS	( 463 )	A	NZ	4.38
299	493	GLU	( 546 )	A	OE2	-	410	LYS	( 463 )	A	NZ	3.67
300	506	GLU	( 559 )	A	OE1	-	562	HIS	( 615 )	A	ND1	4.87
301	506	GLU	( 559 )	A	OE1	-	562	HIS	( 615 )	A	NE2	2.79
302	506	GLU	( 559 )	A	OE2	-	562	HIS	( 615 )	A	ND1	4.93
303	506	GLU	( 559 )	A	OE2	-	562	HIS	( 615 )	A	NE2	3.44
304	517	ASP	( 570 )	A	OD2	-	523	ARG	( 576 )	A	NH2	5.79
305	518	GLU	( 571 )	A	OE1	-	515	ARG	( 568 )	A	NH1	4.47
306	518	GLU	( 571 )	A	OE1	-	515	ARG	( 568 )	A	NH2	6.51
307	518	GLU	( 571 )	A	OE1	-	515	ARG	( 568 )	A	NE	4.96
308	518	GLU	( 571 )	A	OE2	-	515	ARG	( 568 )	A	NH1	3.04
309	518	GLU	( 571 )	A	OE2	-	515	ARG	( 568 )	A	NH2	4.71
310	518	GLU	( 571 )	A	OE2	-	515	ARG	( 568 )	A	NE	2.86
311	519	ASP	( 572 )	A	OD1	-	245	ARG	( 298 )	A	NH1	6.69
312	519	ASP	( 572 )	A	OD2	-	245	ARG	( 298 )	A	NH1	4.55
313	519	ASP	( 572 )	A	OD2	-	245	ARG	( 298 )	A	NH2	6.69
314	519	ASP	( 572 )	A	OD2	-	245	ARG	( 298 )	A	NE	5.47
315	519	ASP	( 572 )	A	OD1	-	514	ARG	( 567 )	A	NE	5.81
316	519	ASP	( 572 )	A	OD2	-	514	ARG	( 567 )	A	NH1	5.93
317	519	ASP	( 572 )	A	OD2	-	514	ARG	( 567 )	A	NH2	5.85
318	519	ASP	( 572 )	A	OD2	-	514	ARG	( 567 )	A	NE	4.30
319	519	ASP	( 572 )	A	OD1	-	515	ARG	( 568 )	A	NE	6.11
320	524	GLU	( 577 )	A	OE1	-	523	ARG	( 576 )	A	NH1	4.59
321	524	GLU	( 577 )	A	OE1	-	523	ARG	( 576 )	A	NH2	6.36
322	524	GLU	( 577 )	A	OE1	-	523	ARG	( 576 )	A	NE	4.64
323	524	GLU	( 577 )	A	OE2	-	523	ARG	( 576 )	A	NH1	3.10
324	524	GLU	( 577 )	A	OE2	-	523	ARG	( 576 )	A	NH2	4.78
325	524	GLU	( 577 )	A	OE2	-	523	ARG	( 576 )	A	NE	2.91
326	525	GLU	( 578 )	A	OE2	-	237	ARG	( 290 )	A	NH2	6.57
327	525	GLU	( 578 )	A	OE2	-	249	HIS	( 302 )	A	ND1	6.82
328	525	GLU	( 578 )	A	OE2	-	249	HIS	( 302 )	A	NE2	6.96
329	545	GLU	( 598 )	A	OE2	-	515	ARG	( 568 )	A	NE	6.68
330	579	ASP	( 632 )	A	OD1	-	581	ARG	( 634 )	A	NE	5.08
331	579	ASP	( 632 )	A	OD2	-	581	ARG	( 634 )	A	NE	6.85
332	586	ASP	( 639 )	A	OD1	-	557	LYS	( 610 )	A	NZ	5.88
333	586	ASP	( 639 )	A	OD2	-	557	LYS	( 610 )	A	NZ	6.67
334	593	ASP	( 646 )	A	OD2	-	557	LYS	( 610 )	A	NZ	6.41
335	593	ASP	( 646 )	A	OD1	-	603	HIS	( 656 )	A	ND1	5.10
336	593	ASP	( 646 )	A	OD1	-	603	HIS	( 656 )	A	NE2	2.87
337	593	ASP	( 646 )	A	OD2	-	603	HIS	( 656 )	A	ND1	6.73
338	593	ASP	( 646 )	A	OD2	-	603	HIS	( 656 )	A	NE2	4.58
339	597	GLU	( 650 )	A	OE1	-	560	LYS	( 613 )	A	NZ	3.63
340	597	GLU	( 650 )	A	OE2	-	560	LYS	( 613 )	A	NZ	2.93
341	608	ASP	( 661 )	A	OD1	-	611	LYS	( 664 )	A	NZ	6.85
342	608	ASP	( 661 )	A	OD1	-	612	LYS	( 665 )	A	NZ	4.48
343	608	ASP	( 661 )	A	OD2	-	612	LYS	( 665 )	A	NZ	3.11
344	622	ASP	( 675 )	A	OD1	-	266	HIS	( 319 )	A	ND1	4.84
345	622	ASP	( 675 )	A	OD1	-	266	HIS	( 319 )	A	NE2	3.13
346	622	ASP	( 675 )	A	OD2	-	266	HIS	( 319 )	A	ND1	5.03
347	622	ASP	( 675 )	A	OD2	-	266	HIS	( 319 )	A	NE2	2.87
348	625	SER	( 678 )	A	O	-	581	ARG	( 634 )	A	NH1	4.09

349	625	SER ( 678 ) A	O -	581	ARG ( 634 ) A	NH2	5.97
350	625	SER ( 678 ) A	O -	581	ARG ( 634 ) A	NE	4.73
351	626	SER ( 678 ) A	O' -	581	ARG ( 634 ) A	NH1	2.97
352	626	SER ( 678 ) A	O' -	581	ARG ( 634 ) A	NH2	4.64
353	626	SER ( 678 ) A	O' -	581	ARG ( 634 ) A	NE	2.87

```

Contact between loop ..... : 262 GLU ( 315 ) A      - 262 GLU ( 315 ) A
and loop ..... : 263 SER ( 316 ) A      - 263 SER ( 316 ) A
  2 262 GLU ( 315 ) A      N <> 263 SER ( 316 ) A      N      D= 3.56 H-ene= -- 0 Sym= 1 (B-B)
  3 262 GLU ( 315 ) A      CA <> 263 SER ( 316 ) A      N      D= 2.45 H-ene= -- 0 Sym= 1 (B-B)
  4 262 GLU ( 315 ) A      CA <> 263 SER ( 316 ) A      CA     D= 3.81 H-ene= -- 0 Sym= 1 (B-B)
  5 262 GLU ( 315 ) A      C  <> 263 SER ( 316 ) A      N      D= 1.32 H-ene= -- 0 Sym= 1 (B-B)
  6 262 GLU ( 315 ) A      C  <> 263 SER ( 316 ) A      CA     D= 2.41 H-ene= -- 0 Sym= 1 (B-B)
  7 262 GLU ( 315 ) A      C  <> 263 SER ( 316 ) A      C      D= 2.98 H-ene= -- 0 Sym= 1 (B-B)
  8 262 GLU ( 315 ) A      C  <> 263 SER ( 316 ) A      O      D= 3.20 H-ene= -- 0 Sym= 1 (B-B)
  9 262 GLU ( 315 ) A      C  <> 263 SER ( 316 ) A      CB     D= 3.69 H-ene= -- 0 Sym= 1 (B-S)
 10 262 GLU ( 315 ) A      O  <> 263 SER ( 316 ) A      N      D= 2.24 H-ene= -- 0 Sym= 1 (B-B)
 11 262 GLU ( 315 ) A      O  <> 263 SER ( 316 ) A      CA     D= 2.72 H-ene= -- 0 Sym= 1 (B-B)
 12 262 GLU ( 315 ) A      O  <> 263 SER ( 316 ) A      C      D= 2.88 H-ene= -- 0 Sym= 1 (B-B)
 13 262 GLU ( 315 ) A      O  <> 263 SER ( 316 ) A      O      D= 3.24 H-ene= -- 0 Sym= 1 (B-B)
 14 262 GLU ( 315 ) A      CB  <> 263 SER ( 316 ) A      N      D= 3.20 H-ene= -- 0 Sym= 1 (S-B)
 15 262 GLU ( 315 ) A      CG  <> 263 SER ( 316 ) A      N      D= 3.79 H-ene= -- 0 Sym= 1 (S-B)

```

```

Contact between loop ..... : 262 GLU ( 315 ) A      - 262 GLU ( 315 ) A
and loop ..... : 264 GLY ( 317 ) A      - 264 GLY ( 317 ) A
  2 262 GLU ( 315 ) A      O  <> 264 GLY ( 317 ) A      N      D= 3.43 H-ene= -- 0 Sym= 1 (B-B)

```

```

Contact between loop ..... : 262 GLU ( 315 ) A      - 262 GLU ( 315 ) A
and loop ..... : 265 ASP ( 318 ) A      - 265 ASP ( 318 ) A
  2 262 GLU ( 315 ) A      N  <> 265 ASP ( 318 ) A      CG     D= 3.98 H-ene= -- 0 Sym= 1 (B-S)
  3 262 GLU ( 315 ) A      N  <> 265 ASP ( 318 ) A      OD2    D= 3.09 H-ene= 0.55 Sym= 1 (B-S)
  4 262 GLU ( 315 ) A      O  <> 265 ASP ( 318 ) A      N      D= 3.18 H-ene= 0.66 Sym= 1 (B-B)
  5 262 GLU ( 315 ) A      O  <> 265 ASP ( 318 ) A      CA     D= 3.88 H-ene= -- 0 Sym= 1 (B-B)
  6 262 GLU ( 315 ) A      O  <> 265 ASP ( 318 ) A      CB     D= 3.41 H-ene= -- 0 Sym= 1 (B-S)
  7 262 GLU ( 315 ) A      O  <> 265 ASP ( 318 ) A      CG     D= 3.55 H-ene= -- 0 Sym= 1 (B-S)

```

```

Contact between loop ..... : 262 GLU ( 315 ) A      - 262 GLU ( 315 ) A
and loop ..... : 462 LYS ( 515 ) A      - 462 LYS ( 515 ) A
  2 262 GLU ( 315 ) A      CG  <> 462 LYS ( 515 ) A      NZ     D= 3.72 H-ene= -- 0 Sym= 1 (S-S)
  3 262 GLU ( 315 ) A      CD  <> 462 LYS ( 515 ) A      NZ     D= 3.80 H-ene= -- 0 Sym= 1 (S-S)
  4 262 GLU ( 315 ) A      OE2 <> 462 LYS ( 515 ) A      CE     D= 3.54 H-ene= -- 0 Sym= 1 (S-S)
  5 262 GLU ( 315 ) A      OE2 <> 462 LYS ( 515 ) A      NZ     D= 3.01 H-ene= 0.61 Sym= 1 (S-S)

```

```

Contact between loop ..... : 262 GLU ( 315 ) A      - 262 GLU ( 315 ) A
and loop ..... : 466 ARG ( 519 ) A      - 466 ARG ( 519 ) A
  2 262 GLU ( 315 ) A      CG  <> 466 ARG ( 519 ) A      CB     D= 3.96 H-ene= -- 0 Sym= 1 (S-S)
  3 262 GLU ( 315 ) A      CD  <> 466 ARG ( 519 ) A      CB     D= 4.01 H-ene= -- 0 Sym= 1 (S-S)
  4 262 GLU ( 315 ) A      OE2 <> 466 ARG ( 519 ) A      CD     D= 3.77 H-ene= -- 0 Sym= 1 (S-S)

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### Salt bridge D570E

290	517	GLU ( 570 ) A	OE1 -	515	ARG ( 568 ) A	NH1	3.26
291	517	GLU ( 570 ) A	OE1 -	515	ARG ( 568 ) A	NH2	5.14
292	517	GLU ( 570 ) A	OE1 -	515	ARG ( 568 ) A	NE	4.97
293	517	GLU ( 570 ) A	OE2 -	515	ARG ( 568 ) A	NH1	4.38
294	517	GLU ( 570 ) A	OE2 -	515	ARG ( 568 ) A	NH2	6.56
295	517	GLU ( 570 ) A	OE2 -	515	ARG ( 568 ) A	NE	5.74
296	518	GLU ( 571 ) A	OE1 -	515	ARG ( 568 ) A	NH1	6.76
297	518	GLU ( 571 ) A	OE1 -	515	ARG ( 568 ) A	NE	5.23
298	518	GLU ( 571 ) A	OE2 -	515	ARG ( 568 ) A	NH1	4.63
299	518	GLU ( 571 ) A	OE2 -	515	ARG ( 568 ) A	NH2	5.42
300	518	GLU ( 571 ) A	OE2 -	515	ARG ( 568 ) A	NE	3.41