Name	#	%	alpha	beta	other	χ1 act.	**χ1 com.**	χ2 act.	**χ2 com.**	χ3 act.	**χ3 com.**	χ4 act.	**χ4 com.**	χ1 range	χ2 range	χ3 range	χ4 range	x1 1/2width	x2 1/2width	x3 1/2width	x4 1/2width
arginine																					
ptp85	3	0%	0%	1%	0%		**62**		**180**		**65**		**85**	30 to 90	150 to -150	35 to 95	55 to 115				
ptp180	11	1%	0%	2%	2%	71	**62**	171	**180**	65	**65**	-161	**-175**	30 to 90	150 to -150	35 to 95	155 to -145	±8	+7 -16	±5	±8
ptt85	16	2%	1%	2%	2%	65	**62**	-178	**180**	-179	**180**	88	**85**	30 to 90	150 to -150	150 to -150	55 to 115	±7	±9	±7	±11
ptt180	16	2%	1%	2%	2%	59	**62**	176	**180**	-178	**180**	-177	**180**	30 to 90	150 to -150	150 to -150	150 to -150	±10	±7	±10	+19 -8
ptt-85	15	2%	1%	2%	2%	66	**62**	-176	**180**	-178	**180**	-83	**-85**	30 to 90	150 to -150	150 to -150	-115 to -55	±9	±8	±7	±9
ptm180	6	1%	0%	1%	1%		**62**		**180**		**-65**		**175**	30 to 90	150 to -150	-95 to -35	145 to -155				
ptm-85	5	1%	0%	0%	1%		**62**		**180**		**-65**		**-85**	30 to 90	150 to -150	-95 to -35	-115 to -55				
tpp85	11	1%	3%	1%	0%	-178	**-177**	57	**65**	57	**65**	85	**85**	155 to -145	35 to 95	35 to 95	55 to 115	±8	±8	±7	±9
tpp180	8	1%	1%	0%	1%		**-177**		**65**		**65**		**-175**	155 to -145	35 to 95	35 to 95	155 to -145				
tpt85	20	2%	3%	2%	2%	177	**-177**	64	**65**	180	**180**	86	**85**	155 to -145	35 to 95	150 to -150	55 to 115	±9	±7	±9	±9
tpt180	15	2%	3%	1%	1%	179	**-177**	60	**65**	178	**180**	163	**180**	155 to -145	35 to 95	150 to -150	150 to -150	±7	+8 -15	±8	±11
ttp85	33	4%	5%	3%	3%	-179	**-177**	177	**180**	65	**65**	83	**85**	155 to -145	150 to -150	35 to 95	55 to 115	±9	±12	±8	±9
ttp180	25	3%	5%	3%	1%	-178	**-177**	-178	**180**	65	**65**	-162	**-175**	155 to -145	150 to -150	35 to 95	155 to -145	±9	+8 -14	±8	+30 -12
ttp-105	9	1%	1%	1%	1%		**-177**		**180**		**65**		**-105**	155 to -145	150 to -150	35 to 95	-135 to -75				
ttt85	19	2%	2%	2%	2%	-175	**-177**	176	**180**	179	**180**	83	**85**	155 to -145	150 to -150	150 to -150	55 to 115	±8	±9	±7	±9
ttt180	33	4%	3%	7%	3%	-179	**-177**	177	**180**	-179	**180**	170	**180**	155 to -145	150 to -150	150 to -150	150 to -150	±10	±8	±7	+10 -32
ttt-85	26	3%	3%	3%	2%	-179	**-177**	179	**180**	180	**180**	-86	**-85**	155 to -145	150 to -150	150 to -150	-115 to -55	±10	±9	±9	±10
ttm105	10	1%	2%	1%	0%	-178	**-177**	170	**180**	-66	**-65**	107	**105**	155 to -145	150 to -150	-95 to -35	75 to 135	±10	+8 -13	±9	±9
ttm180	13	1%	0%	4%	1%	180	**-177**	-178	**180**	-67	**-65**	176	**175**	155 to -145	150 to -150	-95 to -35	145 to -155	±9	±7	±6	±10
ttm-85	28	3%	3%	3%	3%	-175	**-177**	-178	**180**	-65	**-65**	-84	**-85**	155 to -145	150 to -150	-95 to -35	-115 to -55	±9	±11	±10	±8
mtp85	22	2%	2%	3%	2%	-69	**-67**	177	**180**	64	**65**	84	**85**	-95 to -35	150 to -150	35 to 95	55 to 115	±7	±12	±8	±8
mtp180	45	5%	4%	3%	6%	-65	**-67**	176	**180**	64	**65**	-174	**-175**	-95 to -35	150 to -150	35 to 95	155 to -145	±7	±14	±8	±14
mtp-105	7	1%	0%	2%	1%	-62	**-67**	179	**180**	67	**65**	-113	**-105**	-95 to -35	150 to -150	35 to 95	-135 to -75	±6	±10	±8	+6 -14
mtt85	34	4%	4%	4%	3%	-67	**-67**	178	**180**	179	**180**	83	**85**	-95 to -35	150 to -150	150 to -150	55 to 115	±7	+18 -10	±8	+10 -18
mtt180	89	9%	9%	5%	12%	-67	**-67**	-178	**180**	-177	**180**	174	**180**	-95 to -35	150 to -150	150 to -150	150 to -150	±8	±8	±8	±16
mtt-85	53	6%	4%	7%	6%	-66	**-67**	-177	**180**	-179	**180**	-83	**-85**	-95 to -35	150 to -150	150 to -150	-115 to -55	±7	±8	±8	±8
mtm105	15	2%	1%	1%	2%	-68	**-67**	-179	**180**	-65	**-65**	103	**105**	-95 to -35	150 to -150	-95 to -35	75 to 135	±7	±8	±8	±10
mtm180	48	5%	1%	4%	8%	-68	**-67**	173	**180**	-64	**-65**	180	**175**	-95 to -35	150 to -150	-95 to -35	145 to -155	±8	±12	±8	+34 -12
mtm-85	54	6%	13%	2%	3%	-69	**-67**	-167	**-167**	-63	**-65**	-86	**-85**	-95 to -35	165 to -135	-95 to -35	-115 to -55	±9	±8	±8	±8
mmt85	7	1%	1%	1%	1%		**-62**		**-68**		**180**		**85**	-90 to -30	-100 to -40	150 to -150	55 to 115				
mmt180	18	2%	1%	3%	2%	-63	**-62**	-66	**-68**	-179	**180**	-168	**180**	-90 to -30	-100 to -40	150 to -150	150 to -150	±8	±8	±6	+30 -18
mmt-85	22	2%	0%	4%	3%	-60	**-62**	-72	**-68**	-178	**180**	-92	**-85**	-90 to -30	-100 to -40	150 to -150	-115 to -55	±9	±8	±10	±8
mmm180	11	1%	0%	2%	2%	-64	**-62**	-74	**-68**	-67	**-65**	172	**175**	-90 to -30	-100 to -40	-95 to -35	145 to -155	±8	±10	±6	±8
mmm-85	22	2%	2%	3%	3%	-62	**-62**	-64	**-68**	-61	**-65**	-82	**-85**	-90 to -30	-100 to -40	-95 to -35	-115 to -55	±8	±8	±10	±8
		82%	79%	81%	84%																
	769		234	146	389																

Name	#	%	alpha	beta	other	χ^1	**χ^1**	χ^2	**χ^2**	χ^3	**χ^3**	χ^4	**χ^4**	χ^1	χ^2	χ^3	χ^4	x1	x2	x3	x4
lysine						act.	**com.**	act.	**com.**	act.	**com.**	act.	**com.**	range	range	range	range	1/2width	1/2width	1/2width	1/2width
ptpt	7	1%	0%	2%	0%		**62**		**180**		**68**		**180**	30 to 90	150 to -150	40 to 100	150 to -150				
pttp	13	1%	0%	1%	2%	63	**62**	177	**180**	172	**180**	61	**65**	30 to 90	150 to -150	150 to -150	35 to 95	±9	±9	±8	±9
pttt	29	2%	0%	4%	3%	64	**62**	179	**180**	180	**180**	180	**180**	30 to 90	150 to -150	150 to -150	150 to -150	±7	±10	±9	±8
pttm	8	1%	0%	1%	1%		**62**		**180**		**180**		**-65**	30 to 90	150 to -150	150 to -150	-95 to -35				
ptmt	5	0%	0%	1%	0%		**62**		**180**		**68**		**180**	30 to 90	150 to -150	-100 to -40	150 to -150				
tptp	11	1%	1%	1%	1%	179	**-177**	59	**68**	163	**180**	60	**65**	155 to -145	40 to 100	150 to -150	35 to 95				
tptt	32	3%	5%	1%	2%	179	**-177**	62	**68**	173	**180**	171	**180**	155 to -145	40 to 100	150 to -150	150 to -150	±4	±3	±1	+1 -12
tptm	7	1%	1%	1%	0%		**-177**		**68**		**180**		**-65**	155 to -145	40 to 100	150 to -150	-95 to -35				
ttpp	12	1%	1%	0%	1%		**-177**		**180**		**68**		**65**	155 to -145	150 to -150	40 to 100	35 to 95				
ttpt	25	2%	2%	5%	1%	-177	**-177**	169	**180**	71	**68**	172	**180**	155 to -145	150 to -150	40 to 100	150 to -150	±9	±9	±13	±8
tttp	49	4%	5%	5%	3%	-177	**-177**	-170	**180**	-177	**180**	69	**65**	155 to -145	150 to -150	150 to -150	35 to 95	±8	±9	±10	±8
tttt	162	13%	17%	19%	10%	-177	**-177**	178	**180**	179	**180**	180	**180**	155 to -145	150 to -150	150 to -150	150 to -150	±8	±10	±9	±7
tttm	37	3%	4%	2%	3%	-176	**-177**	-175	**180**	-167	**180**	-59	**-65**	155 to -145	150 to -150	150 to -150	-95 to -35	±7	±9	±9	±8
ttmt	20	2%	2%	4%	1%	-174	**-177**	-160	**180**	-54	**-68**	-174	**180**	155 to -145	150 to -150	-100 to -40	150 to -150	±10	±8	±7	±9
ttmm	5	0%	1%	0%	0%		**-177**		**180**		**-68**		**-65**	155 to -145	150 to -150	-100 to -40	-95 to -35				
mptt	4	0%	0%	0%	1%		**-90**		**68**		**180**		**180**	-120 to -60	40 to 100	150 to -150	150 to -150				
mtpp	12	1%	1%	1%	1%	-62	**-67**	-177	**180**	71	**68**	68	**65**	-95 to -35	150 to -150	40 to 100	35 to 95	±7	±10	±8	±6
mtpt	38	3%	4%	2%	3%	-69	**-67**	174	**180**	65	**68**	175	**180**	-95 to -35	150 to -150	40 to 100	150 to -150	±8	±10	±10	±11
mttp	42	3%	2%	4%	4%	-67	**-67**	-176	**180**	175	**180**	71	**65**	-95 to -35	150 to -150	150 to -150	35 to 95	±9	±7	±10	±11
mttt	244	20%	23%	14%	21%	-67	**-67**	179	**180**	179	**180**	179	**180**	-95 to -35	150 to -150	150 to -150	150 to -150	±8	±9	±9	±10
mttm	56	5%	3%	5%	6%	-65	**-67**	180	**180**	-178	**180**	-63	**-65**	-95 to -35	150 to -150	150 to -150	-95 to -35	±8	±9	±10	±10
mtmt	40	3%	6%	2%	3%	-68	**-67**	-171	**180**	-68	**-68**	-175	**180**	-95 to -35	150 to -150	-100 to -40	150 to -150	±7	±9	±9	±9
mtmm	12	1%	0%	1%	1%	-68	**-67**	-178	**180**	-68	**-68**	-63	**-65**	-95 to -35	150 to -150	-100 to -40	-95 to -35	±9	±8	±9	±8
mmtp	9	1%	0%	0%	1%		**-62**		**-68**		**180**		**65**	-90 to -30	-100 to -40	150 to -150	35 to 95				
mmtt	77	6%	3%	5%	8%	-61	**-62**	-64	**-68**	-177	**180**	-179	**180**	-90 to -30	-100 to -40	150 to -150	150 to -150	±8	±9	±9	±9
mmtm	18	1%	1%	1%	2%	-64	**-62**	-68	**-68**	-176	**180**	-71	**-65**	-90 to -30	-100 to -40	150 to -150	-95 to -35	±10	±8	±8	±10
mmmt	10	1%	0%	1%	1%	-59	**-62**	-59	**-68**	-70	**-68**	-173	**180**	-90 to -30	-100 to -40	-100 to -40	150 to -150	±9	±8	±8	±10
		81%	82%	80%	82%																
	984		261	194	529																
methionine																					
ptp	12	2%	1%	3%	3%	68	**62**	-167	**180**	88	**75**			30 to 90	150 to -150	45 to 105		+11 -5	+21 -6	±9	
ptm	17	3%	1%	6%	4%	67	**62**	174	**180**	-78	**-75**			30 to 90	150 to -150	-105 to -45		±5	±6	±6	
tpp	30	5%	8%	2%	5%	-177	**-177**	66	**65**	75	**75**			155 to -145	35 to 95	45 to 105		±7	+14 -9	+14 -10	
tpt	9	2%	1%	4%	1%	179	**-177**	67	**65**	-179	**180**			155 to -145	35 to 95	150 to -150		±6	±4	±6	
ttp	28	5%	7%	7%	2%	176	**-177**	178	**180**	73	**75**			155 to -145	150 to -150	45 to 105		±7	±7	±8	
ttt	17	3%	5%	2%	2%	180	**-177**	171	**180**	174	**180**			155 to -145	150 to -150	150 to -150		±5	±6	+12 -18	
ttm	36	7%	3%	10%	8%	-177	**-177**	176	**180**	-78	**-75**			155 to -145	150 to -150	-105 to -45		±7	±7	±10	
mtp	92	17%	22%	10%	17%	-68	**-67**	177	**180**	72	**75**			-95 to -35	150 to -150	45 to 105		±6	±8	±10	
mtt	43	8%	9%	8%	7%	-67	**-67**	177	**180**	-178	**180**			-95 to -35	150 to -150	150 to -150		±7	±10	+8 -14	
mtm	58	11%	12%	11%	9%	-67	**-67**	-177	**180**	-76	**-75**			-95 to -35	150 to -150	-105 to -45		±9	±8	±12	
mmp	15	3%	3%	1%	4%	-64	**-65**	-63	**-65**	103	**103**			-95 to -35	-95 to -35	75 to 135		±6	±7	±7	
mmt	10	2%	0%	2%	3%	-63	**-65**	-64	**-65**	180	**180**			-95 to -35	-95 to -35	150 to -150		±9	±11	±15	
mmm	105	19%	21%	16%	19%	-66	**-65**	-60	**-65**	-67	**-70**			-95 to -35	-95 to -35	-100 to -40		±8	±9	+15 -10	
		86%	91%	84%	83%																
	472		175	112	185																

Name	#	%	alpha	beta	other	χ^1	**χ^1**	χ^2	**χ^2**	χ^3	**χ^3**	χ^4	**χ^4**	χ^1	χ^2	χ^3	χ^4	x1	x2	x3
glutamate						act.	**com.**	act.	**com.**	act.	**com.**	act.	**com.**	range	range	range	range	1/2width	1/2width	1/2width
pt-20	80	5%	1%	9%	7%	63	**62**	-175	**180**	-18	**-20**			30 to 90	150 to -150	-90 to 90		±10	±10	+15 -23
pm0	32	2%	0%	0%	4%	71	**70**	-79	**-80**	5	**0**			40 to 100	-110 to -50	-50 to 50		±11	±10	±13
tp10	91	6%	10%	2%	6%	-177	**-177**	65	**65**	13	**10**			155 to -145	35 to 95	-10 to 90		±10	±10	+10 -16
tt 0	350	24%	25%	42%	18%	-177	**-177**	178	**180**	2	**0**			155 to -145	150 to -150	-90 to 90		±10	±10	±25
tm-20	17	1%	1%	1%	1%		**-177**		**-80**		**-25**			155 to -145	-115 to -55	-50 to 10				
mp0	88	6%	0%	2%	10%	-65	**-65**	85	**85**	-3	**0**			-95 to -35	55 to 115	-60 to 60		±10	±9	+16 -25
mt-10	484	33%	36%	29%	32%	-67	**-67**	177	**180**	-10	**-10**			-95 to -35	150 to -150	-90 to 90		±9	±12	+23 -18
mm-40	197	13%	19%	7%	12%	-65	**-65**	-58	**-65**	-40	**-40**			-95 to -35	-95 to -35	-90 to 30		±10	±10	+15 -26
		91%	92%	92%	90%															
	1339		394	225	720															
glutamine																				
pt 20	37	4%	1%	5%	6%	64	**62**	180	**180**	20	**20**			30 to 90	150 to -150	-90 to 90		±6	±6	±8
pm0	15	2%	0%	1%	3%		**70**		**-75**		**0**			45 to 105	-105 to -45	-60 to 60				
tp-100	14	2%	4%	2%	0%		**-177**		**65**		**-100**			155 to -145	35 to 95	-150 to 0				
tp60	78	9%	13%	9%	7%	-175	**-177**	64	**65**	60	**60**			155 to -145	35 to 95	0 to 90		±6	±8	+11 -21
tt 0	140	16%	16%	29%	12%	-174	**-177**	173	**180**	-5	**0**			155 to -145	150 to -150	-90 to 90		±6	±6	+52 -11
mp0	24	3%	0%	1%	5%		**-65**		**85**		**0**			-95 to -35	55 to 115	-60 to 60				
mt -30	304	35%	40%	26%	36%	-67	**-67**	177	**180**	-25	**-25**			-95 to -35	150 to -150	-90 to 90		±8	±7	±29
mm-40	127	15%	12%	13%	17%	-66	**-65**	-60	**-65**	-40	**-40**			-95 to -35	-95 to -35	-95 to 0		±8	±10	+14 -19
mm100	22	3%	4%	1%	2%		**-65**		**-65**		**100**			-95 to -35	-95 to -35	0 to 150				
		88%	89%	86%	88%															
	761		229	137	395															
aspartate																				
p-10	203	10%	1%	2%	13%	61	**62**	-4	**-10**					30 to 90	-90 to 0			±6	+13 -21	
p30	194	9%	1%	5%	12%	65	**62**	9	**30**					30 to 90	0 to 90			±9	±28	
t 0	438	21%	8%	44%	20%	-176	**-177**	1	**0**					155 to -145	-50 to 50			±10	±16	
t70	118	6%	11%	7%	4%	-179	**-177**	65	**65**					155 to -145	50 to 90			±8	±13	
m -20	1088	51%	77%	38%	47%	-71	**-70**	-15	**-15**					-100 to -40	-90 to 20					
		96%	97%	95%	96%															
	2041		365	232	1444															
asparagine																				
p-10	103	7%	0%	1%	10%	63	**62**	-13	**-10**					30 to 90	-90 to 0			+8 -3	+10 -4	
p30	132	9%	0%	7%	12%	64	**62**	34	**30**					30 to 90	0 to 90			±3	±5	
t-20	177	12%	5%	21%	12%	-174	**-174**	-20	**-20**					155 to -145	-120 to 0			±3	+11 -26	
t30	228	15%	13%	18%	15%	-168	**-177**	31	**30**					155 to -145	0 to 80			±11	+23 -17	
m-20	580	39%	65%	28%	33%	-71	**-65**	-23	**-20**					-95 to -35	-60 to 10			±8	±17	
m-80	118	8%	8%	9%	8%	-71	**-65**	-76	**-75**					-95 to -35	-100 to -60			±7	±7	
m120	58	4%	3%	3%	4%	-64	**-65**	132	**120**					-95 to -35	60 to 160			±7	+7 -24	
		94%	95%	88%	95%															
	1396		293	179	924															

Name	#	%	alpha	beta	other	χ^1	**χ^1**	χ^2	**χ^2**	χ^3	**χ^3**	χ^4	**χ^4**	χ^1	χ^2	χ^3	χ^4	x1	x2
isoleucine						act.	**com.**	act.	**com.**	act.	**com.**	act.	**com.**	range	range	range	range	1/2width	1/2width
pp	10	1%	0%	1%	0%		**62**		**100**					30 to 90	70 to 130				
pt	216	13%	4%	13%	22%	61	**62**	171	**170**					30 to 90	140 to -160			±7	±7
tp	36	2%	2%	1%	4%	-169	**-177**	66	**66**					155 to -145	35 to 95			±10	±9
tt	127	8%	1%	8%	14%	-174	**-177**	167	**170**					155 to -145	135 to -165			+13 -8	±8
mp	19	1%	0%	2%	1%		**-65**		**100**					-95 to -35	70 to 130			-±2	-±2
mt	993	60%	81%	58%	41%	-66	**-65**	169	**170**					-95 to -35	140 to -160			±8	±8
mm	242	15%	10%	16%	17%	-57	**-57**	-59	**-59**					-85 to -25	-90 to -30			±8	±7
		99%	99%	98%	99%														
	1643		496	629	518														
leucine																			
pp	21	1%	0%	2%	1%		**62**		**80**					30 to 90	50 to 110				
tp	750	29%	30%	36%	23%	177	**-177**	63	**65**					155 to -145	35 to 95			±8	±7
tt	49	2%	1%	3%	1%	-172	**-172**	147	**147**					160 to -140	120 to 180			±6	±6
mp	63	2%	1%	5%	2%	-85	**-85**	66	**65**					-115 to -55	45 to 105			±8	+8 -12
mt	1548	59%	62%	46%	66%	-65	**-65**	174	**174**					-95 to -35	150 to -150			±9	±9
		93%	95%	93%	93%														
	2431		836	644	951														
histidine																			
p-80	51	9%	0%	6%	13%	60	**62**	-75	**-75**					30 to 90	-120 to -50			±7	±9
p80	26	4%	0%	4%	6%	61	**62**	78	**78**					30 to 90	50 to 120			±13	±7
t-160	31	5%	5%	14%	1%	-178	**-177**	-163	**-163**					155 to -145	150 to -120			±10	+27 -9
t-80	64	11%	17%	9%	9%	-173	**-177**	-81	**-81**					155 to -145	-120 to -50			±8	+12 -28
t60	94	16%	24%	17%	12%	-178	**-177**	62	**62**					155 to -145	50 to 120			±10	+25 -8
m-70	174	29%	26%	30%	30%	-60	**-65**	-69	**-69**					-95 to -35	-120 to -30			±9	±20
m170	44	7%	9%	3%	9%	-63	**-65**	165	**165**					-95 to -35	120 to -160			±8	+8 -20
m80	78	13%	14%	10%	14%	-66	**-65**	83	**83**					-95 to -35	50 to 120			±8	+21 -11
		94%	94%	92%	95%														
	562		124	143	295														
tryptophan																			
p-90	67	11%	2%	13%	14%	58	**62**	-87	**-90**					30 to 90	-130 to -60			+12 -7	±7
p90	34	6%	1%	9%	6%	60	**62**	92	**90**					30 to 90	60 to 130			+13 -7	±6
t-105	100	16%	27%	10%	14%	178	**-177**	-105	**-105**					155 to -145	-130 to -60			+16 -12	±12
t90	109	18%	28%	14%	15%	-178	**-177**	88	**90**					155 to -145	0 to 100			±7	±9
m-90	31	5%	0%	7%	7%	-70	**-65**	-87	**-90**					-95 to -35	-130 to -60			±6	±10
m0	48	8%	15%	2%	8%	-66	**-65**	-4	**-4**					-95 to -35	-40 to 20			±7	+9 -26
m95	195	32%	22%	43%	29%	-69	**-65**	95	**95**					-95 to -35	60 to 130			±8	±16
		94%	95%	98%	92%														
	584		140	175	269														

Name	#	%	alpha	beta	other	χ^1	**χ^1**	χ^2	**χ^2**	χ^3	**χ^3**	χ^4	**χ^4**	χ^1	χ^2	χ^3	χ^4	x1	x2
tyrosine						act.	**com.**	act.	**com.**	act.	**com.**	act.	**com.**	range	range	range	range	1/2width	1/2width
p90	182	13%	1%	21%	12%	63	**62**	89	**90**					30 to 90	60 to 90, -90 to-60			±10	±10
t80	486	34%	55%	25%	30%	176	**-177**	77	**80**					155 to -145	20 to90, -90 to -75			±9	±12
m-85	618	43%	26%	50%	45%	-65	**-65**	-87	**-85**					-95 to -35	50 to 90, -90 to -50			±8	±16
m -30	124	9%	15%	4%	9%	-64	**-65**	-42	**-30**					-95 to -35	-50 to 0, 0 to 50			±9	+31 -6
		98%	97%	99%	97%														
	1410		290	468	652														
phenylalanine																			
p90	202	13%	1%	24%	11%	59	**62**	88	**90**					30 to 90	60 to 90, -90 to-60			±9	±9
t80	522	33%	57%	18%	29%	177	**-177**	80	**80**					155 to -145	20 to90, -90 to -75			±11	+11 -18
m-85	697	44%	29%	51%	47%	-64	**-65**	-83	**-85**					-95 to -35	50 to 90, -90 to -50			±9	±14
m -30	149	9%	12%	5%	11%	-64	**-65**	-19	**-30**					-95 to -35	-50 to 0, 0 to 50			±7	+14 -21
		98%	97%	99%	98%														
	1570		389	514	667														
proline																			
Cγ endo	379	44%	23%	54%	43%	30	**30**							15 to 60				±5	
Cγ exo	372	43%	68%	28%	44%	-29	**-30**							-60 to -15				±5	
cis, Cγ er	56	6%	0%	1%	7%	31	**30**							15 to 60				±4	
		93%	91%	84%	94%														
	807		20	57	730														
threonine																			
p	1200	49%	25%	31%	65%	59	**62**							30 to 90				±9	
t	169	7%	0%	13%	6%	-171	**-175**							155 to -145				±10	
m	1062	43%	74%	55%	29%	-61	**-65**							-95 to -35				±7	
		99%	100%	99%	99%														
	2431		395	672	1364														
valine																			
p	169	6%	2%	8%	8%	63	**63**		**="-177"**					35 to 95				±8	
t	1931	73%	90%	72%	63%	175	**175**		**="-65"**					145 to -155				±4	
m	526	20%	7%	20%	28%	-64	**-60**		**="60"**					-90 to -30				±5	
		99%	100%	99%	99%														
	2626		622	1080	924														
serine																			
p	1201	48%	33%	36%	55%	64	**62**							30 to 90				±7	
t	541	22%	22%	34%	18%	178	**-177**							155 to -145				±7	
m	714	29%	44%	29%	25%	-65	**-65**							-95 to -35				±6	
		98%	98%	100%	98%														
	2456		350	485	1621														
cysteine																			
p	64	23%	5%	23%	34%	55	**62**							30 to 90				+22 -3	
t	74	26%	20%	45%	21%	-177	**-177**							155 to -145				+12 -5	
m	142	50%	75%	32%	43%	-65	**-65**							-95 to -35				+15 -5	
		99%	100%	100%	98%														
	280		85	65	130														

Name	#	%	alpha	beta	other	χ^2	**χ^2**	χ^3	**χ^3**	$\chi^{2'}$	**$\chi^{2'}$**	χ^2	χ^3	$\chi^{2'}$	χ^2	χ^3	$\chi^{2'}$
disulfide						act.	**com.**	act.	**com.**	act.	**com.**	range	range	range	1/2width	1/2width	1/2width
mmm	70	36%				-61		-81		-75		-95 to -30	-110 to -50	-120 to -40	±11	±9	±16
ppp	15	8%				63		85		85		30 to 90	55 to 115	60 to 115	±10	+14 -9	±11
mpp	33	17%				-65		100		85		-100 to -35	70 to 130	50 to 115	±12	±9	±14
pmm	6	3%				90		-91		-64		60 to 120	-120 to -60	-95 to -35	+10 -18	±8	±15
mpm	11	6%				-86		102		-102		-120 to -40	70 to 130	-160 to -90	±11	±8	±9
mmt	19	10%				-92		-90		-149		-120 to -30	-120 to -60	150 to -120	+15 -10	±8	±12
ppt	16	8%				52		82		180		30 to 95	50 to 110	150 to -120	±10	±8	±9
mpt	5	3%				-68		96		147		-100 to -40	65 to 125	115 to 175	+13 -8	±8	±14
tmt	6	3%				172		-83		-168		140 to -160	-115 to -55	160 to -140	±9	±8	±11
tpt	1	1%				122		87		163		95 to 150	55 to 115	130 to -170	±8	±8	±8
	182	95%															