

Backbone Dependent Rotamers

Aspartate*

Name	#	%	χ^1 act.	χ^1 com.	χ^2 act.	χ^2 com.	χ^1 range	χ^2 range	χ^1 half width	χ^2 half width
χ^m-10	283	75%	-72	-70	-14	-10	-100 to -40	-60 to 10	± 7	± 9
χ^t60	72	19%	-176	-177	63	60	155 to -145	-20 to 90	+7 -12	+8 -15
	355	95%								
χ^m-20	92	38%	-66	-65	-21	-20	-95 to -35	-90 to 20	± 8	+12 -24
χ^p10	14	6%	65	65	13	10	35 to 95	-20 to 40	± 7	± 9
χ^t-10	130	53%	-176	-177	-10	-10	155 to -145	-90 to 90	± 7	+15 -21
	236	97%								
Lm-30	54	61%	-64	-65	-29	-30	-95 to -35	-90 to 0	± 7	+10 -17
Lt30	26	29%	-162	-165	43	30	170 to -130	0 to 60	± 6	+5 -27
	80	90%								

Asparagine*

Name	#	%	χ^1 act.	χ^1 com.	χ^2 act.	χ^2 com.	χ^1 range	χ^2 range	χ^1 half width	χ^2 half width
χ^m-20	204	66%	-72	-70	-17	-20	-100 to -40	-60 to 10	± 7	± 11
χ^m-80	26	8%	-72	-70	-81	-80	-100 to -40	-100 to -60	± 10	+22 -7
χ^m120	9	3%		-70		120	-100 to -40	60 to 160		
χ^t60	38	12%	-175	-177	64	60	155 to -145	30 to 80	+11 -6	+15 -23
χ^t-60	14	5%		-172		-60	155 to -145	-120 to 0		
	291	94%								
χ^p60	17	8%		65		60	35 to 95	-20 to 100		
χ^m-50	74	36%	-66	-65	-49	-50	-95 to -35	-90 to 0	± 8	+39 -9
χ^m120	7	3%		-65		120	-100 to -40	60 to 160		
χ^t10	77	38%	-179	-177	11	10	150 to -150	-90 to 90	± 4	+14 -3
	175	86%								
Lm-30	91	55%	-65	-65	-30	-30	-95 to -35	-70 to 10	± 7	+9 -23
Lt30	58	35%	-166	-165	32	30	165 to -135	0 to 60	± 8	± 10
	149	90%								

* For "other" secondary structural class use the backbone-independent rotamers.