

	A	C	D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	V	W	Y
1:Q	0.29%	0.01%	0.28%	4.42%	0.01%	0.29%	6.22%	0.02%	4.49%	4.84%	0.26%	0.23%	4.69%	67.93%	4.94%	0.17%	0.28%	0.29%	0.15%	0.19%
2:S	1.60%	1.73%	0.02%	0.00%	1.77%	0.04%	0.03%	0.04%	0.00%	0.19%	0.00%	0.02%	3.57%	0.00%	0.06%	89.04%	1.27%	0.04%	0.04%	0.53%
3:A	76.44%	0.04%	4.41%	0.13%	0.05%	5.29%	0.01%	0.15%	0.00%	0.09%	0.01%	0.04%	0.77%	0.00%	0.03%	0.52%	1.36%	10.63%	0.00%	0.02%
4:L	0.05%	0.00%	0.00%	0.03%	0.03%	0.02%	0.01%	0.02%	0.03%	90.77%	0.74%	0.00%	3.26%	1.87%	1.68%	0.06%	0.06%	1.36%	0.02%	0.00%
5:T	6.14%	0.05%	0.05%	0.01%	0.05%	0.15%	0.03%	2.60%	0.08%	0.07%	0.05%	0.85%	3.97%	0.00%	0.18%	4.68%	80.85%	0.18%	0.00%	0.01%
6:Q	0.11%	0.00%	0.08%	2.59%	0.00%	0.18%	1.68%	0.00%	0.78%	4.11%	0.04%	0.01%	4.69%	78.16%	7.25%	0.06%	0.05%	0.09%	0.09%	0.01%
7:P	3.02%	0.24%	0.03%	0.00%	0.22%	0.06%	0.46%	0.09%	0.01%	1.22%	0.00%	0.11%	81.44%	0.03%	1.00%	8.01%	3.84%	0.15%	0.01%	0.05%
8:A	80.72%	0.03%	3.79%	0.12%	0.05%	3.60%	0.02%	0.12%	0.01%	0.09%	0.01%	0.05%	0.80%	0.00%	0.02%	0.49%	1.43%	8.64%	0.00%	0.02%
9:S	1.83%	1.73%	0.06%	0.00%	1.70%	0.06%	0.08%	0.02%	0.00%	0.28%	0.00%	0.04%	5.35%	0.00%	0.05%	86.87%	0.85%	0.10%	0.04%	0.94%
10:V	3.12%	0.00%	0.12%	4.58%	0.10%	1.88%	0.01%	0.51%	0.28%	8.62%	5.84%	0.00%	0.24%	0.20%	0.23%	0.08%	0.47%	73.68%	0.02%	0.00%
11:S	2.03%	1.63%	0.02%	0.00%	1.64%	0.03%	0.04%	0.03%	0.00%	0.19%	0.00%	0.02%	4.30%	0.00%	0.05%	88.00%	1.43%	0.04%	0.04%	0.48%
12:G	1.42%	0.01%	0.22%	6.51%	0.00%	86.67%	0.01%	0.00%	0.16%	0.13%	0.08%	0.01%	0.05%	0.13%	2.18%	0.04%	0.10%	1.66%	0.62%	0.00%
13:S	3.45%	1.76%	0.02%	0.00%	1.47%	0.05%	0.05%	0.08%	0.00%	0.22%	0.00%	0.03%	6.74%	0.00%	0.09%	82.80%	2.70%	0.09%	0.05%	0.38%
14:P	1.66%	0.13%	0.05%	0.01%	0.12%	0.06%	1.56%	0.12%	0.00%	3.29%	0.00%	0.07%	88.01%	0.16%	1.47%	2.04%	1.09%	0.11%	0.01%	0.04%
15:G	0.69%	0.02%	0.13%	1.78%	0.00%	91.48%	0.00%	0.03%	0.07%	0.03%	0.00%	0.01%	0.03%	0.03%	5.18%	0.15%	0.07%	0.28%	0.01%	0.00%
16:Q	0.04%	0.01%	0.07%	0.77%	0.01%	0.04%	6.97%	0.01%	0.60%	4.96%	0.03%	0.21%	3.04%	77.43%	5.54%	0.07%	0.04%	0.04%	0.05%	0.07%
17:S	2.65%	0.22%	0.00%	0.02%	0.15%	0.03%	0.00%	0.01%	0.01%	1.21%	0.02%	0.00%	4.07%	0.01%	0.05%	89.27%	1.48%	0.08%	0.67%	0.07%
18:I	0.27%	0.05%	0.07%	0.01%	1.85%	0.13%	0.03%	77.06%	0.18%	3.94%	2.80%	0.80%	0.14%	0.00%	0.77%	1.99%	3.32%	6.59%	0.00%	0.01%
19:T	5.73%	0.08%	0.08%	0.01%	0.15%	0.14%	0.06%	3.76%	0.07%	0.21%	0.07%	1.20%	4.00%	0.00%	0.58%	5.35%	78.08%	0.39%	0.00%	0.03%
20:I	0.41%	0.11%	0.10%	0.02%	4.57%	0.15%	0.06%	66.22%	0.33%	5.74%	4.84%	1.54%	0.28%	0.01%	0.34%	1.72%	4.63%	8.90%	0.01%	0.04%
21:S	2.48%	1.75%	0.06%	0.00%	1.88%	0.05%	0.13%	0.05%	0.00%	0.46%	0.00%	0.06%	6.54%	0.00%	0.11%	84.00%	1.07%	0.10%	0.06%	1.18%
22:C	0.11%	73.98%	0.38%	0.02%	2.69%	1.83%	0.78%	0.03%	0.02%	0.30%	0.00%	0.39%	0.25%	0.01%	1.72%	6.20%	0.07%	0.05%	1.98%	9.18%
23:T	5.60%	0.33%	0.19%	0.01%	0.23%	0.46%	0.09%	3.91%	0.14%	0.25%	0.08%	1.83%	8.69%	0.01%	0.42%	10.49%	66.66%	0.54%	0.01%	0.05%
24:G	1.79%	0.01%	0.54%	5.03%	0.00%	85.97%	0.01%	0.10%	0.15%	0.11%	0.01%	0.02%	0.10%	0.08%	4.88%	0.09%	0.19%	0.89%	0.02%	0.00%
25:T	6.86%	0.28%	0.78%	0.05%	0.74%	0.90%	0.37%	11.65%	0.46%	0.70%	0.37%	5.84%	3.02%	0.02%	2.44%	10.99%	52.51%	1.82%	0.01%	0.18%
26:S	0.39%	1.93%	0.50%	0.05%	0.13%	3.79%	0.56%	2.94%	1.34%	0.22%	0.15%	8.89%	0.33%	0.06%	35.72%	36.11%	6.24%	0.25%	0.08%	0.33%
27:S	0.39%	6.10%	0.49%	0.02%	0.22%	5.63%	0.40%	2.24%	0.20%	0.17%	0.03%	5.07%	0.44%	0.02%	8.37%	64.87%	4.74%	0.18%	0.13%	0.30%
28:D	2.59%	0.28%	58.07%	16.49%	0.28%	4.37%	5.21%	0.29%	0.53%	0.24%	0.01%	5.65%	0.21%	0.45%	0.34%	0.97%	0.43%	1.06%	0.00%	2.50%
29:V	3.56%	0.12%	1.54%	0.13%	5.74%	1.88%	0.15%	8.07%	0.02%	9.62%	0.14%	0.25%	0.85%	0.01%	0.12%	0.80%	0.91%	66.01%	0.00%	0.07%
30:G	1.69%	0.02%	0.62%	6.32%	0.00%	87.41%	0.01%	0.01%	0.17%	0.10%	0.06%	0.01%	0.05%	0.12%	1.29%	0.08%	0.11%	1.55%	0.38%	0.00%
31:S	0.52%	1.95%	1.06%	0.05%	0.09%	5.03%	0.58%	1.75%	0.37%	0.14%	0.05%	9.22%	0.35%	0.03%	6.64%	65.95%	5.84%	0.14%	0.04%	0.20%
32:Y	0.33%	10.12%	3.02%	0.18%	13.34%	0.26%	8.06%	0.18%	0.11%	1.97%	0.01%	2.08%	0.54%	0.74%	0.70%	12.20%	0.18%	0.25%	0.26%	45.47%
33:N	0.61%	0.48%	11.35%	0.97%	0.47%	1.01%	4.83%	4.02%	9.06%	0.56%	0.35%	50.04%	0.31%	0.43%	1.35%	6.75%	4.35%	0.52%	0.02%	2.48%
34:L	0.29%	0.10%	0.07%	0.01%	5.35%	0.10%	0.73%	2.31%	0.00%	75.46%	0.05%	0.08%	8.77%	0.05%	0.80%	0.75%	0.33%	4.71%	0.00%	0.04%
35:V	4.26%	0.03%	1.39%	0.07%	1.24%	2.07%	0.02%	1.77%	0.00%	2.54%	0.11%	0.02%	0.08%	0.00%	0.03%	0.08%	0.12%	86.17%	0.00%	0.01%
36:S	2.49%	1.59%	0.05%	0.00%	1.67%	0.06%	0.13%	0.04%	0.00%	0.46%	0.00%	0.06%	6.70%	0.00%	0.12%	84.31%	1.08%	0.10%	0.06%	1.08%
37:W	0.19%	13.67%	0.16%	0.31%	0.56%	10.29%	0.11%	0.01%	0.03%	0.86%	0.01%	0.06%	0.10%	0.07%	4.08%	1.90%	0.04%	0.12%	65.95%	1.46%
38:Y	0.22%	9.71%	7.71%	0.31%	4.71%	0.49%	8.50%	0.69%	1.34%	0.96%	0.02%	11.76%	0.27%	0.21%	0.74%	5.17%	0.38%	0.22%	0.16%	46.43%
39:Q	0.09%	0.02%	0.19%	2.30%	0.02%	0.12%	11.99%	0.09%	1.35%	2.85%	0.01%	0.21%	3.44%	72.87%	3.93%	0.09%	0.13%	0.09%	0.01%	0.20%
40:Q	0.17%	0.05%	0.41%	5.01%	0.05%	0.27%	7.83%	0.07%	5.33%	3.11%	0.21%	0.67%	2.14%	67.91%	5.29%	0.21%	0.21%	0.29%	0.36%	0.41%
41:H	0.28%	0.68%	5.35%	0.24%	0.46%	0.30%	45.97%	1.32%	2.80%	3.09%	0.06%	23.48%	1.61%	1.19%	4.86%	2.13%	0.84%	0.25%	0.02%	5.07%
42:P	1.62%	0.00%	0.00%	0.10%	0.01%	0.03%	0.11%	0.07%	0.03%	1.46%	0.01%	0.00%	88.32%	0.55%	0.93%	4.12%	2.58%	0.06%	0.00%	0.00%
43:G	1.47%	0.27%	3.44%	0.12%	0.02%	91.29%	0.06%	0.05%	0.01%	0.05%	0.00%	0.07%	0.03%	0.00%	0.60%	0.61%	0.05%	1.80%	0.01%	0.05%
44:K	0.42%	0.03%	0.47%	3.68%	0.01%	0.46%	0.34%	3.37%	58.49%	0.20%	0.54%	7.28%	0.27%	1.55%	10.42%	1.02%	11.12%	0.21%	0.01%	0.11%
45:A	49.07%	0.05%	10.05%	0.38%	0.11%	12.45%	0.08%	0.40%	0.01%	0.29%	0.01%	0.14%	0.70%	0.00%	0.07%	0.63%	1.45%	24.05%	0.00%	0.04%
46:P	0.69%	0.01%	0.01%	0.00%	0.03%	0.01%	0.92%	0.03%	0.00%	1.46%	0.00%	0.01%	94.18%	0.03%	0.60%	1.24%	0.72%	0.04%	0.00%	0.01%
47:K	0.38%	0.01%	0.41%	3.96%	0.02%	0.22%	0.42%	5.83%	58.71%	0.46%	0.52%	5.93%	0.36%	4.60%	9.10%	0.67%	8.07%	0.24%	0.00%	0.08%
48:L	0.53%	0.26%	0.12%	0.01%	12.17%	0.23%	0.78%	3.52%	0.01%	65.18%	0.12%	0.07%	3.60%	0.05%	1.22%	0.64%	0.25%	11.15%	0.01%	0.10%
49:M	0.37%	0.01%	0.02%	0.22%	0.34%	0.25%	0.01%	15.13%	3.93%	7.76%	50.99%	0.28%	0.25%	0.15%	6.21%	0.43%	7.66%	5.88%	0.11%	0.00%
50:I	0.80%	0.06%	0.23%	0.02%	2.00%	0.27%	0.12%	67.03%	0.22%	3.78%	1.52%	3.17%	0.49%	0.01%	0.23%	3.13%	11.50%	5.42%	0.00%	0.03%
51:Y	0.26%	9.92%	5.55%	0.30%	10.79%	0.29%	9.02%	0.20%	0.12%	1.14%	0.00%	3.38%	0.44%	0.65%	0.56%	10.12%	0.26%	0.25%	0.16%	46.59%
52:E	2.85%	0.00%	3.43%	80.45%	0.00%	5.17%	0.10%	0.01%	2.99%	0.13%	0.10%	0.13%	0.15%	2.53%	0.24%	0.06%	0.29%	1.32%	0.02%	0.03%
53:G	4.65%	0.26%	17.05%	0.43%	0.08%	25.05%	0.12%	0.34%	0.04%	0.23%	0.01%	0.34%	0.04%	0.01%	0.58%	0.79%	0.11%	49.81%	0.01%	0.06%
54:S	0.92%	4.03%	1.01%	0.08%	0.40%	3.46%	1.07%	7.51%	1.18%	0.48%	0.27%	15.33%	1.04%	0.09%	6.81%	41.58%	13.61%	0.52%	0.13%	0.49%
55:K	0.62%	0.02%	0.98%	11.50%	0.03%	0.94%	0.39%	0.65%	57.44%	0.75%	3.30%	4.63%	0.36%	5.28%	7.36%	0.70%	4.17%	0.42%	0.32%	0.11%
56:R	0.07%	0.41%	0.01%	0.09%	0.01%	4.71%	0.08%	0.00%	0.38%	0.79%	0.06%	0.02%	0.92%	1.48%	72.22%	0.37%	0.09%	0.07%	18.22%	0.01%
57:P	1.37%	0.01%	0.02%	0.00%	0.02%	0.01%	0.89%	0.01%	0.01%	0.54%	0.00%	0.13%	94.60%	0.03%	0.26%	1.54%	0.55%	0.01%	0.00%	0.01%
58:S	1.35%	0.09%	0.00%	0.06%	0.16%	0.02%	0.00%	0.03%	0.01%	1.86%	0.00%	0.00%	4.62%	0.02%	0.05%	90.73%	0.88%	0.03%	0.04%	0.04%
59:G	0.52%	0.02%	0.22%	2.15%	0.00%	94.60%	0.00%	0.01%	0.04%	0.03%	0.01%	0.00%	0.02%	0.04%	1.43%	0.08%	0.02%	0.59%	0.21%	0.00%
60:V	9.48%	0.07%	3.37%	0.15%	2.14%	4.82%	0.33%	16.75%	0.05%	9.15%	0.34%	0.83%	0.99%	0.02%	0.16%	0.85%	2.51%	47.91%	0.00%	0.08%
61:S	2.20%	10.52%	0.18%	0.02%	10.80%	0.16%	0.30%	0.13%	0.01%	1.95%	0.01%	0.11%	1.99%	0.01%	0.31%	66.74%	0.71%	0.27%	0.31%	3.28%
62:N	0.74%	0.75%	9.17%	0.39%	0.67%	1.19%	4.72%	5.40%	2.29%	0.65%	0.14%	49.73%	0.55%	0.28%	1.21%	12.54%	6.61%	0.57%	0.01%	2.41%
63:R	0.24%	2.30%	0.45%	0.01%	0.21%	1.56%	16.45%	0.05%	0.02%	4.48%	0.00%	0.30%	6.68%	0.39%	64.97%	0.93%	0.13%	0.20%	0.12%	0.51%
64:F	0.04%	2.23%	0.02%																	