

	A	C	D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	V	W	Y
1:Q	0.19%	0.00%	0.19%	3.72%	0.00%	0.19%	3.12%	0.02%	3.73%	4.00%	0.17%	0.17%	3.91%	4.07%	0.11%	0.19%	0.18%	0.09%	0.08%	
2:V	3.30%	0.01%	0.08%	2.46%	0.14%	2.17%	0.00%	1.44%	0.25%	5.67%	5.24%	0.01%	0.11%	0.06%	0.20%	0.08%	0.35%	78.43%	0.02%	0.00%
3:Q	0.03%	0.02%	0.12%	0.71%	0.01%	0.05%	8.81%	0.04%	3.36%	1.83%	0.05%	0.49%	1.35%	79.85%	2.84%	0.07%	0.11%	0.04%	0.15%	0.08%
4:L	0.37%	0.03%	0.01%	0.27%	1.47%	0.19%	0.09%	1.20%	0.47%	74.68%	3.76%	0.03%	2.55%	1.58%	1.35%	0.59%	0.34%	10.78%	0.23%	0.01%
5:Q	0.03%	0.01%	0.04%	0.63%	0.00%	0.07%	2.72%	0.01%	2.61%	1.69%	0.03%	0.12%	1.05%	87.01%	3.55%	0.05%	0.05%	0.04%	0.26%	0.02%
6:E	4.00%	0.00%	2.43%	84.35%	0.00%	5.51%	0.03%	0.01%	1.15%	0.07%	0.08%	0.06%	0.04%	0.42%	0.09%	0.02%	0.09%	1.64%	0.01%	0.01%
7:S	2.11%	0.01%	0.00%	0.01%	0.01%	0.03%	0.00%	0.00%	0.00%	2.73%	0.04%	0.00%	3.33%	0.00%	0.06%	89.03%	1.14%	0.05%	1.45%	0.00%
8:G	0.76%	0.40%	1.58%	0.04%	0.00%	94.62%	0.01%	0.02%	0.00%	0.00%	0.00%	0.06%	0.01%	0.00%	0.55%	1.41%	0.04%	0.47%	0.01%	0.01%
9:P	0.39%	0.00%	0.00%	0.02%	0.00%	0.00%	0.07%	0.01%	0.00%	1.17%	0.00%	0.00%	95.62%	0.47%	0.69%	0.94%	0.59%	0.01%	0.00%	0.00%
10:G	0.58%	0.01%	0.14%	1.99%	0.00%	90.12%	0.00%	0.04%	0.06%	0.05%	0.00%	0.00%	0.03%	0.02%	6.52%	0.08%	0.07%	0.30%	0.00%	0.00%
11:L	0.03%	0.00%	0.00%	0.02%	0.03%	0.02%	0.02%	0.04%	0.01%	93.54%	0.29%	0.00%	2.23%	0.89%	1.94%	0.05%	0.03%	0.84%	0.02%	0.00%
12:V	3.89%	0.00%	0.10%	3.20%	0.03%	3.60%	0.00%	0.52%	0.17%	5.54%	5.72%	0.00%	0.10%	0.05%	0.17%	0.10%	0.31%	76.45%	0.04%	0.00%
13:K	0.12%	0.00%	0.10%	3.59%	0.00%	0.32%	0.04%	0.18%	75.81%	0.11%	4.13%	0.78%	0.06%	2.60%	8.71%	0.11%	3.17%	0.12%	0.06%	0.00%
14:P	2.72%	0.10%	0.03%	0.00%	0.13%	0.04%	0.50%	0.07%	0.00%	1.02%	0.00%	0.11%	84.62%	0.01%	0.41%	6.91%	3.18%	0.10%	0.00%	0.04%
15:S	1.98%	0.04%	0.00%	0.07%	0.05%	0.14%	0.00%	0.00%	0.01%	10.66%	0.07%	0.00%	2.14%	0.01%	0.23%	77.26%	0.49%	0.31%	6.54%	0.00%
16:G	2.70%	0.00%	0.19%	12.37%	0.00%	79.43%	0.00%	0.01%	0.31%	0.09%	0.12%	0.01%	0.04%	0.11%	1.39%	0.04%	0.12%	2.80%	0.27%	0.00%
17:T	4.74%	0.02%	0.04%	0.01%	0.03%	0.08%	0.03%	1.90%	0.15%	0.04%	0.10%	1.54%	2.56%	0.00%	0.09%	2.56%	86.01%	0.09%	0.00%	0.01%
18:L	0.03%	0.00%	0.00%	0.04%	0.04%	0.01%	0.09%	0.02%	0.02%	89.97%	0.55%	0.00%	3.92%	2.38%	1.75%	0.04%	0.04%	1.09%	0.01%	0.00%
19:S	2.20%	1.76%	0.04%	0.00%	1.67%	0.03%	0.06%	0.03%	0.00%	0.19%	0.00%	0.05%	3.96%	0.00%	0.04%	87.82%	1.12%	0.04%	0.03%	0.94%
20:L	0.06%	0.05%	0.01%	0.00%	2.69%	0.03%	0.67%	0.65%	0.00%	88.40%	0.01%	0.01%	3.63%	0.03%	1.12%	0.06%	0.02%	2.55%	0.00%	0.01%
21:T	4.53%	0.06%	0.05%	0.00%	0.11%	0.10%	0.04%	3.51%	0.12%	0.15%	0.24%	0.99%	3.25%	0.00%	0.25%	4.59%	81.67%	0.31%	0.00%	0.02%
22:C	0.05%	81.47%	0.21%	0.00%	2.12%	1.51%	0.39%	0.01%	0.00%	0.23%	0.00%	0.22%	0.11%	0.01%	1.62%	4.54%	0.03%	0.02%	0.55%	6.88%
23:A	74.39%	0.07%	2.76%	0.38%	0.16%	6.31%	0.08%	0.45%	0.01%	0.38%	0.01%	0.13%	1.42%	0.01%	0.10%	1.14%	4.53%	7.66%	0.00%	0.02%
24:V	3.52%	0.01%	1.08%	0.04%	0.47%	1.67%	0.01%	0.90%	0.00%	1.04%	0.06%	0.01%	0.03%	0.00%	0.01%	0.03%	0.04%	91.06%	0.00%	0.00%
25:S	1.17%	2.21%	0.03%	0.00%	1.75%	0.06%	0.03%	0.03%	0.00%	0.16%	0.00%	0.02%	2.38%	0.00%	0.06%	90.72%	0.71%	0.07%	0.04%	0.57%
26:G	3.66%	0.78%	5.81%	0.31%	0.04%	83.42%	0.25%	0.11%	0.02%	0.04%	0.00%	0.34%	0.21%	0.01%	1.00%	2.12%	0.38%	1.34%	0.02%	0.14%
27:G	6.72%	0.66%	14.16%	0.32%	0.04%	72.69%	0.18%	0.05%	0.01%	0.05%	0.00%	0.15%	0.07%	0.00%	0.50%	0.85%	0.13%	3.21%	0.04%	0.15%
28:S	1.09%	1.20%	0.01%	0.00%	1.11%	0.02%	0.03%	0.01%	0.00%	0.15%	0.00%	0.01%	3.47%	0.00%	0.03%	91.95%	0.51%	0.03%	0.01%	0.36%
29:I	0.26%	0.08%	0.06%	0.01%	3.94%	0.12%	0.03%	74.51%	0.07%	4.67%	2.66%	0.76%	0.15%	0.00%	0.57%	1.54%	3.02%	7.45%	0.00%	0.02%
30:S	0.28%	2.25%	0.43%	0.04%	0.10%	4.77%	0.52%	2.43%	0.95%	0.19%	0.10%	8.10%	0.25%	0.03%	31.80%	42.00%	5.23%	0.21%	0.07%	0.24%
31:S	0.71%	3.94%	0.89%	0.06%	0.31%	3.41%	0.80%	6.42%	1.05%	0.35%	0.27%	13.25%	0.81%	0.04%	9.90%	45.66%	11.17%	0.40%	0.14%	0.41%
32:S	1.15%	2.55%	1.38%	0.08%	0.64%	5.26%	0.60%	6.80%	0.56%	0.60%	0.19%	10.56%	0.51%	0.04%	5.29%	51.51%	11.19%	0.57%	0.10%	0.43%
33:N	0.48%	0.25%	9.31%	0.87%	0.37%	0.59%	4.08%	4.04%	10.66%	0.42%	0.43%	54.20%	0.24%	0.55%	1.17%	5.03%	4.63%	0.59%	0.02%	2.08%
34:W	0.02%	4.81%	0.01%	0.05%	0.14%	2.17%	0.02%	0.00%	0.03%	0.86%	0.01%	0.01%	0.05%	0.05%	3.38%	1.15%	0.02%	0.02%	86.82%	0.37%
35:W	0.05%	1.73%	0.01%	0.16%	0.06%	2.30%	0.01%	0.00%	0.18%	1.25%	0.05%	0.01%	0.06%	0.06%	7.27%	1.98%	0.07%	0.05%	84.63%	0.06%
36:S	0.37%	1.48%	0.80%	0.02%	0.05%	4.37%	0.37%	1.26%	0.53%	0.08%	0.05%	8.09%	0.23%	0.05%	6.68%	70.63%	4.71%	0.08%	0.02%	0.14%
37:W	0.01%	2.42%	0.00%	0.00%	0.04%	0.84%	0.01%	0.00%	0.01%	0.33%	0.00%	0.00%	0.01%	0.00%	4.16%	0.38%	0.01%	0.00%	91.70%	0.08%
38:V	3.42%	0.01%	0.71%	0.04%	0.35%	1.47%	0.00%	1.49%	0.00%	0.56%	0.03%	0.01%	0.03%	0.00%	0.01%	0.04%	0.08%	91.76%	0.00%	0.00%
39:R	0.02%	2.22%	0.06%	0.00%	0.01%	1.24%	1.35%	0.00%	0.00%	0.35%	0.00%	0.02%	0.58%	0.03%	93.65%	0.34%	0.01%	0.01%	0.03%	0.06%
40:Q	0.02%	0.00%	0.02%	0.98%	0.00%	0.03%	1.77%	0.00%	0.70%	2.34%	0.02%	0.01%	2.88%	87.27%	3.88%	0.01%	0.03%	0.02%	0.01%	0.01%
41:P	11.04%	0.25%	0.04%	0.01%	0.25%	0.07%	0.37%	0.12%	0.01%	0.37%	0.00%	0.16%	55.73%	0.00%	0.21%	21.94%	9.18%	0.08%	0.01%	0.16%
42:P	0.46%	0.00%	0.00%	0.02%	0.00%	0.01%	0.07%	0.01%	0.00%	1.18%	0.00%	0.00%	95.11%	0.46%	0.70%	1.21%	0.74%	0.01%	0.00%	0.00%
43:G	1.11%	0.02%	0.26%	5.40%	0.00%	90.13%	0.00%	0.01%	0.08%	0.06%	0.04%	0.01%	0.02%	0.08%	1.04%	0.07%	0.04%	1.46%	0.16%	0.00%
44:K	0.12%	0.00%	0.03%	5.58%	0.00%	0.11%	0.02%	0.02%	83.89%	0.07%	0.65%	0.55%	0.07%	4.56%	2.64%	0.05%	1.55%	0.06%	0.01%	0.00%
45:G	0.29%	0.05%	0.11%	0.51%	0.00%	96.50%	0.00%	0.01%	0.01%	0.01%	0.01%	0.01%	0.00%	0.00%	1.73%	0.21%	0.01%	0.28%	0.26%	0.00%
46:L	0.04%	0.00%	0.00%	0.02%	0.02%	0.02%	0.02%	0.05%	0.01%	93.80%	0.37%	0.00%	2.87%	1.00%	0.78%	0.05%	0.02%	0.92%	0.01%	0.00%
47:E	3.75%	0.00%	10.35%	73.52%	0.00%	5.33%	0.17%	0.02%	2.84%	0.11%	0.12%	0.43%	0.09%	1.16%	0.18%	0.06%	0.21%	1.59%	0.01%	0.05%
48:W	0.06%	5.22%	0.02%	0.16%	0.13%	2.35%	0.02%	0.01%	0.16%	1.25%	0.05%	0.01%	0.06%	0.04%	5.91%	2.10%	0.07%	0.07%	82.08%	0.23%
49:I	0.21%	0.03%	0.03%	0.01%	1.33%	0.05%	0.03%	81.62%	0.11%	2.27%	1.75%	0.65%	0.17%	0.00%	0.13%	1.34%	7.09%	3.16%	0.00%	0.01%
50:G	0.46%	0.02%	0.24%	1.50%	0.00%	95.69%	0.00%	0.00%	0.03%	0.02%	0.01%	0.00%	0.01%	0.02%	1.16%	0.07%	0.03%	0.39%	0.31%	0.00%
51:E	2.07%	0.00%	7.86%	74.57%	0.00%	5.32%	0.19%	0.22%	4.10%	0.15%	0.02%	0.85%	0.09%	1.39%	0.79%	1.04%	0.50%	0.79%	0.00%	0.05%
52:I	0.33%	0.12%	0.11%	0.02%	5.97%	0.15%	0.05%	65.83%	0.25%	5.10%	5.30%	1.21%	0.16%	0.01%	0.33%	1.29%	3.42%	10.30%	0.01%	0.06%
53:Y	0.11%	9.50%	1.95%	0.04%	9.39%	0.14%	5.95%	0.15%	0.07%	0.82%	0.00%	3.05%	0.31%	0.10%	0.48%	9.60%	0.14%	0.07%	0.11%	58.03%
54:H	0.20%	0.20%	1.41%	0.18%	0.23%	0.10%	75.87%	0.07%	0.14%	2.85%	0.00%	1.02%	3.52%	6.52%	5.67%	0.39%	0.15%	0.13%	0.01%	1.34%
55:S	0.36%	3.87%	0.46%	0.02%	0.26%	8.20%	0.20%	2.84%	0.23%	0.21%	0.03%	3.33%	0.15%	0.01%	7.06%	69.45%	2.81%	0.24%	0.11%	0.15%
56:G	1.41%	0.03%	0.42%	5.37%	0.00%	87.60%	0.01%	0.01%	0.10%	0.07%	0.04%	0.01%	0.02%	0.09%	2.41%	0.05%	0.05%	1.31%	1.01%	0.00%
57:S	0.15%	0.71%	0.47%	0.07%	0.04%	3.16%	0.14%	2.59%	1.54%	0.08%	0.14%	4.74%	0.07%	0.03%	31.29%	51.29%	2.26%	1.17%	0.03%	0.05%
58:T	5.28%	0.06%	0.12%	0.01%	0.15%	0.14%	0.06%	4.64%	0.14%	0.14%	0.09%	1.76%	2.06%	0.00%	0.56%	5.88%	78.53%	0.33%	0.00%	0.04%
59:N	0.20%	0.21%	2.46%	0.26%	0.13%	0.21%	2.33%	2.13%	8.51%	0.11%	0.14%	68.50%	0.16%	0.26%	1.11%	5.86%	5.47%	0.11%	0.01%	1.85%
60:Y	0.08%	7.98%	2.17%	0.02%	2.99%	0.27%	5.79%	0.07%	0.24%	0.72%	0.00%	2.81%	0.23%	0.12%	0.36%	6.44%	0.18%	0.04%	0.20%	69.28%
61:N	0.16%	0.21%	3.61%	0.30%	0.10%	0.23%	2.29%	1.64%	10.91%	0.09%	0.13%	69.85%	0.12%	0.18%	1.09%	4.14%	3.05%	0.07%	0.00%	1.81%
62:P	1.81%	0.00%	0.00%	0.04%	0.00%	0.02%	0.02%	0.00%	0.02%	0.94%	0.05%	0.00%	90.36%	0.34%	0.28%	3.85%	2.12%	0.11%	0.03%	0.00%
63:S	2.14%	1.76%	0.03%	0.00%	1.67%	0.03%	0.09%	0.03%	0.00%	0.20%	0.00%	0.03%	4.14%	0.00%	0.04%	87.63%	1.20%	0.04%	0.03%	0.94%
64:L	0.06%	0.04%	0.02%	0.00%	2.33%	0.03%														