

	A	C	D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	V	W	Y
1:Q	0.10%	0.00%	0.10%	2.93%	0.00%	0.10%	4.25%	0.01%	2.92%	3.07%	0.10%	0.09%	2.99%	79.82%	3.12%	0.06%	0.11%	0.10%	0.05%	0.08%
2:S	0.98%	1.00%	0.01%	0.00%	1.04%	0.01%	0.01%	0.01%	0.00%	0.07%	0.00%	0.01%	2.11%	0.00%	0.02%	93.68%	0.67%	0.01%	0.02%	0.34%
3:A	85.52%	0.01%	2.77%	0.05%	0.02%	3.21%	0.00%	0.06%	0.00%	0.03%	0.00%	0.01%	0.46%	0.00%	0.01%	0.29%	0.87%	6.69%	0.00%	0.01%
4:L	0.01%	0.00%	0.00%	0.01%	0.01%	0.01%	0.00%	0.01%	0.01%	94.68%	0.43%	0.00%	1.94%	1.12%	0.92%	0.02%	0.02%	0.81%	0.01%	0.00%
5:T	4.02%	0.02%	0.02%	0.00%	0.01%	0.05%	0.01%	1.71%	0.03%	0.03%	0.02%	0.54%	2.43%	0.00%	0.07%	2.81%	88.17%	0.07%	0.00%	0.00%
6:Q	0.04%	0.00%	0.03%	1.67%	0.00%	0.06%	0.96%	0.00%	0.48%	2.61%	0.01%	0.00%	2.87%	86.67%	4.50%	0.02%	0.02%	0.03%	0.03%	0.00%
7:P	2.02%	0.08%	0.01%	0.00%	0.05%	0.02%	0.22%	0.03%	0.00%	0.33%	0.00%	0.04%	89.21%	0.01%	0.56%	5.10%	2.28%	0.03%	0.00%	0.01%
8:P	1.36%	0.04%	0.02%	0.00%	0.05%	0.02%	0.95%	0.03%	0.00%	1.78%	0.00%	0.01%	93.03%	0.02%	0.52%	1.33%	0.76%	0.05%	0.00%	0.03%
9:S	1.14%	1.10%	0.02%	0.00%	1.10%	0.02%	0.03%	0.01%	0.00%	0.10%	0.00%	0.01%	3.18%	0.00%	0.01%	92.07%	0.52%	0.04%	0.01%	0.63%
10:A	81.64%	0.00%	0.03%	2.30%	0.00%	1.32%	0.00%	0.01%	0.04%	0.20%	0.19%	0.00%	1.87%	0.03%	0.02%	1.21%	5.01%	6.12%	0.01%	0.00%
11:S	1.63%	0.25%	0.01%	0.00%	0.53%	0.01%	0.02%	0.02%	0.00%	0.05%	0.00%	0.01%	3.17%	0.00%	0.01%	93.16%	0.88%	0.02%	0.01%	0.24%
12:G	0.89%	0.00%	0.07%	3.80%	0.00%	93.46%	0.00%	0.00%	0.05%	0.03%	0.02%	0.00%	0.01%	0.05%	0.54%	0.01%	0.03%	0.92%	0.11%	0.00%
13:S	2.28%	1.08%	0.01%	0.00%	0.94%	0.02%	0.02%	0.03%	0.00%	0.08%	0.00%	0.01%	4.16%	0.00%	0.03%	89.41%	1.65%	0.04%	0.02%	0.23%
14:P	1.08%	0.05%	0.01%	0.00%	0.04%	0.02%	1.00%	0.04%	0.00%	2.00%	0.00%	0.03%	92.85%	0.06%	0.85%	1.22%	0.69%	0.04%	0.00%	0.02%
15:G	0.41%	0.01%	0.05%	1.07%	0.00%	95.09%	0.00%	0.01%	0.03%	0.01%	0.00%	0.00%	0.01%	0.01%	3.06%	0.06%	0.02%	0.16%	0.00%	0.00%
16:Q	0.01%	0.00%	0.03%	0.46%	0.00%	0.01%	4.51%	0.00%	0.37%	3.05%	0.01%	0.08%	1.76%	86.22%	3.39%	0.02%	0.01%	0.01%	0.01%	0.03%
17:S	1.78%	0.02%	0.00%	0.01%	0.03%	0.01%	0.00%	0.01%	0.00%	0.73%	0.00%	0.00%	3.24%	0.01%	0.02%	93.15%	0.96%	0.01%	0.02%	0.01%
18:V	3.14%	0.01%	0.91%	0.03%	1.15%	1.75%	0.01%	2.79%	0.00%	3.59%	0.03%	0.02%	0.07%	0.00%	0.03%	0.05%	0.07%	86.35%	0.00%	0.00%
19:T	3.56%	0.03%	0.03%	0.00%	0.05%	0.04%	0.02%	2.36%	0.02%	0.07%	0.02%	0.70%	2.40%	0.00%	0.23%	3.39%	86.96%	0.12%	0.00%	0.01%
20:I	0.13%	0.05%	0.03%	0.00%	3.05%	0.06%	0.02%	78.74%	0.13%	3.43%	3.37%	1.04%	0.10%	0.00%	0.12%	1.08%	2.95%	5.68%	0.00%	0.02%
21:S	1.51%	1.11%	0.02%	0.00%	1.15%	0.02%	0.05%	0.01%	0.00%	0.17%	0.00%	0.02%	4.11%	0.00%	0.04%	90.35%	0.66%	0.03%	0.02%	0.73%
22:C	0.04%	83.95%	0.14%	0.00%	1.64%	1.11%	0.30%	0.01%	0.00%	0.10%	0.00%	0.15%	0.09%	0.00%	1.01%	3.83%	0.02%	0.02%	1.19%	6.40%
23:T	3.85%	0.13%	0.07%	0.00%	0.08%	0.18%	0.03%	2.85%	0.06%	0.09%	0.03%	1.25%	5.69%	0.00%	0.15%	6.94%	78.37%	0.22%	0.00%	0.02%
24:G	1.10%	0.00%	0.20%	3.09%	0.00%	91.79%	0.00%	0.04%	0.05%	0.04%	0.00%	0.00%	0.04%	0.03%	2.97%	0.03%	0.07%	0.54%	0.01%	0.00%
25:T	4.98%	0.12%	0.30%	0.01%	0.30%	0.35%	0.15%	8.62%	0.18%	0.25%	0.16%	4.31%	1.91%	0.01%	1.09%	8.33%	68.17%	0.73%	0.00%	0.06%
26:S	0.14%	1.43%	0.19%	0.01%	0.05%	2.55%	0.24%	1.99%	0.55%	0.08%	0.06%	7.29%	0.13%	0.01%	27.23%	53.53%	4.25%	0.09%	0.03%	0.14%
27:S	0.14%	4.40%	0.18%	0.00%	0.08%	3.77%	0.13%	1.28%	0.06%	0.05%	0.01%	3.25%	0.15%	0.00%	5.48%	77.88%	2.91%	0.06%	0.05%	0.12%
28:D	1.73%	0.05%	89.42%	1.62%	0.02%	3.29%	1.38%	0.01%	0.04%	0.02%	0.00%	0.79%	0.03%	0.02%	0.03%	0.06%	0.04%	0.69%	0.00%	0.77%
29:V	3.81%	0.04%	1.68%	0.07%	2.42%	2.08%	0.12%	5.81%	0.01%	5.77%	0.06%	0.20%	0.34%	0.01%	0.04%	0.80%	0.76%	75.97%	0.00%	0.03%
30:G	3.01%	0.74%	5.04%	0.18%	0.03%	86.69%	0.05%	0.07%	0.00%	0.04%	0.00%	0.08%	0.11%	0.00%	0.73%	1.97%	0.23%	0.98%	0.01%	0.03%
31:G	4.11%	1.29%	6.08%	0.25%	0.05%	81.76%	0.19%	0.07%	0.01%	0.06%	0.00%	0.33%	0.09%	0.01%	1.21%	2.89%	0.20%	1.27%	0.02%	0.12%
32:Y	0.13%	7.62%	2.10%	0.06%	9.51%	0.10%	5.74%	0.07%	0.05%	0.76%	0.00%	1.53%	0.20%	0.31%	0.27%	8.59%	0.07%	0.09%	0.11%	62.68%
33:N	0.29%	0.17%	7.76%	0.44%	0.24%	0.37%	3.34%	3.63%	6.34%	0.27%	0.18%	65.99%	0.13%	0.16%	0.63%	4.29%	3.63%	0.24%	0.01%	1.88%
34:Y	0.06%	6.65%	1.84%	0.16%	7.47%	0.06%	3.77%	0.06%	0.05%	0.34%	0.00%	1.91%	0.17%	0.10%	0.15%	7.19%	0.11%	0.03%	0.04%	69.84%
35:V	2.63%	0.01%	0.76%	0.02%	0.85%	1.27%	0.01%	1.28%	0.00%	1.67%	0.05%	0.01%	0.03%	0.00%	0.01%	0.03%	0.05%	91.32%	0.00%	0.00%
36:S	1.54%	1.04%	0.02%	0.00%	1.10%	0.02%	0.05%	0.01%	0.00%	0.17%	0.00%	0.02%	4.15%	0.00%	0.04%	90.45%	0.67%	0.03%	0.02%	0.68%
37:W	0.06%	10.60%	0.04%	0.13%	0.23%	6.76%	0.03%	0.00%	0.01%	0.53%	0.01%	0.01%	0.04%	0.03%	2.53%	0.99%	0.01%	0.05%	77.26%	0.68%
38:Y	0.08%	6.60%	5.61%	0.12%	3.29%	0.18%	6.32%	0.28%	0.59%	0.38%	0.01%	9.05%	0.09%	0.08%	0.26%	3.12%	0.14%	0.08%	0.06%	63.67%
39:Q	0.03%	0.00%	0.07%	1.49%	0.01%	0.04%	8.15%	0.03%	0.83%	1.81%	0.00%	0.07%	1.99%	83.06%	2.23%	0.02%	0.04%	0.04%	0.00%	0.08%
40:Q	0.06%	0.01%	0.15%	3.22%	0.01%	0.09%	5.76%	0.02%	3.13%	2.13%	0.09%	0.25%	1.33%	79.84%	3.34%	0.07%	0.06%	0.11%	0.15%	0.19%
41:H	0.10%	0.26%	3.79%	0.09%	0.18%	0.10%	62.11%	0.56%	1.28%	2.20%	0.02%	19.03%	1.04%	0.86%	3.18%	0.92%	0.31%	0.09%	0.01%	3.88%
42:P	1.01%	0.00%	0.00%	0.03%	0.00%	0.01%	0.04%	0.02%	0.01%	0.89%	0.00%	0.00%	93.05%	0.35%	0.52%	2.47%	1.56%	0.02%	0.00%	0.00%
43:G	0.84%	0.17%	1.96%	0.04%	0.01%	95.28%	0.02%	0.02%	0.00%	0.01%	0.00%	0.03%	0.01%	0.00%	0.30%	0.42%	0.02%	0.85%	0.00%	0.02%
44:K	0.15%	0.01%	0.18%	2.48%	0.00%	0.16%	0.14%	2.35%	73.20%	0.07%	0.23%	5.54%	0.09%	0.98%	6.69%	0.39%	7.22%	0.08%	0.00%	0.05%
45:A	64.48%	0.02%	7.22%	0.16%	0.03%	8.51%	0.03%	0.14%	0.00%	0.09%	0.00%	0.05%	0.40%	0.00%	0.02%	0.34%	0.96%	17.53%	0.00%	0.02%
46:P	0.31%	0.00%	0.00%	0.00%	0.01%	0.00%	0.55%	0.01%	0.00%	0.87%	0.00%	0.00%	96.85%	0.01%	0.36%	0.60%	0.41%	0.01%	0.00%	0.00%
47:K	0.15%	0.00%	0.15%	2.69%	0.00%	0.07%	0.16%	4.37%	73.72%	0.18%	0.23%	3.73%	0.12%	3.09%	5.74%	0.23%	5.22%	0.11%	0.00%	0.03%
48:L	0.21%	0.10%	0.04%	0.00%	8.81%	0.08%	0.49%	2.50%	0.00%	76.48%	0.04%	0.02%	2.44%	0.02%	0.85%	0.24%	0.10%	7.52%	0.00%	0.04%
49:M	0.14%	0.00%	0.00%	0.09%	0.13%	0.08%	0.00%	11.66%	2.71%	4.88%	66.87%	0.11%	0.08%	0.06%	4.12%	0.15%	5.01%	3.84%	0.04%	0.00%
50:I	0.31%	0.02%	0.08%	0.00%	1.16%	0.11%	0.04%	79.31%	0.09%	2.31%	1.03%	2.24%	0.17%	0.00%	0.09%	1.97%	7.51%	3.52%	0.00%	0.01%
51:Y	0.10%	6.84%	3.87%	0.11%	7.52%	0.10%	6.62%	0.07%	0.05%	0.43%	0.00%	2.57%	0.17%	0.27%	0.22%	6.94%	0.10%	0.09%	0.06%	63.87%
52:E	1.89%	0.00%	3.86%	86.39%	0.00%	3.08%	0.08%	0.00%	1.93%	0.04%	0.04%	0.11%	0.05%	1.51%	0.08%	0.02%	0.11%	0.76%	0.00%	0.03%
53:V	2.62%	0.00%	0.75%	0.02%	0.10%	0.92%	0.00%	0.46%	0.00%	0.33%	0.02%	0.01%	0.01%	0.00%	0.00%	0.01%	0.03%	94.71%	0.00%	0.00%
54:S	0.35%	1.65%	0.42%	0.02%	0.12%	2.33%	0.41%	5.80%	0.51%	0.17%	0.12%	13.11%	0.35%	0.02%	4.67%	59.29%	10.27%	0.20%	0.03%	0.15%
55:K	0.23%	0.00%	0.38%	8.19%	0.01%	0.36%	0.14%	0.29%	72.12%	0.30%	2.48%	3.47%	0.13%	3.60%	4.84%	0.28%	2.85%	0.16%	0.13%	0.04%
56:R	0.03%	0.16%	0.00%	0.04%	0.00%	2.92%	0.03%	0.00%	0.17%	0.49%	0.02%	0.00%	0.63%	1.10%	81.32%	0.14%	0.03%	0.03%	12.88%	0.00%
57:P	0.78%	0.00%	0.01%	0.00%	0.00%	0.00%	0.58%	0.00%	0.00%	0.28%	0.00%	0.05%	97.06%	0.01%	0.12%	0.81%	0.28%	0.00%	0.00%	0.01%
58:S	0.87%	0.03%	0.00%	0.02%	0.06%	0.00%	0.00%	0.01%	0.00%	1.15%	0.00%	0.00%	2.71%	0.01%	0.01%	94.59%	0.49%	0.01%	0.01%	0.01%
59:G	0.20%	0.01%	0.05%	0.87%	0.00%	97.69%	0.00%	0.00%	0.01%	0.01%	0.00%	0.00%	0.00%	0.01%	0.77%	0.02%	0.00%	0.22%	0.12%	0.00%
60:V	2.56%	0.00%	0.53%	0.05%	0.27%	1.11%	0.00%	1.23%	0.00%	0.50%	0.04%	0.01%	0.01%	0.00%	0.01%	0.02%	0.05%	93.59%	0.00%	0.00%
61:P	0.51%	0.03%	0.01%	0.00%	0.03%	0.00%	0.40%	0.03%	0.00%	1.01%	0.00%	0.01%	94.32%	0.02%	0.77%	1.85%	0.96%	0.03%	0.00%	0.01%
62:D	1.83%	0.12%	77.16%	1.26%	0.11%	3.78%	4.74%	0.19%	0.08%	0.10%	0.00%	5.86%	0.19%	0.10%	0.20%	0.52%	0.33%	0.88%	0.00%	2.54%
63:R	0.08%	1.41%	0.18%	0.00%	0.08%	0.89%	11.75%	0.02%	0.00%	2.91%	0.00%	0.12%	4.40%	0.15%	77.16%	0.50%	0.04%	0.08%	0.04%	0.21%
64:F	0.02%	1.56%	0.01%	0.00%	78.54%	0.01														