

	A	C	D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	V	W	Y
1:Q	0.04%	0.00%	0.04%	1.91%	0.00%	0.04%	1.57%	0.00%	1.89%	1.95%	0.04%	0.04%	1.93%	88.46%	1.96%	0.02%	0.04%	0.04%	0.02%	0.02%
2:V	1.56%	0.00%	0.01%	1.16%	0.03%	0.99%	0.00%	0.36%	0.05%	2.82%	2.99%	0.00%	0.02%	0.01%	0.04%	0.01%	0.06%	89.87%	0.00%	0.00%
3:Q	0.00%	0.00%	0.02%	0.23%	0.00%	0.01%	4.73%	0.00%	1.27%	0.67%	0.01%	0.10%	0.45%	91.34%	1.06%	0.01%	0.01%	0.01%	0.03%	0.02%
4:L	0.09%	0.00%	0.00%	0.05%	0.07%	0.04%	0.00%	0.08%	0.06%	89.12%	2.58%	0.00%	1.09%	0.38%	0.25%	0.12%	0.07%	5.99%	0.02%	0.00%
5:V	1.58%	0.00%	0.02%	1.14%	0.02%	0.97%	0.00%	0.34%	0.05%	2.70%	2.78%	0.00%	0.03%	0.01%	0.03%	0.01%	0.08%	90.23%	0.00%	0.00%
6:Q	0.02%	0.00%	0.01%	0.18%	0.00%	0.02%	2.75%	0.00%	0.95%	3.38%	0.03%	0.05%	2.01%	87.86%	2.53%	0.04%	0.03%	0.03%	0.09%	0.01%
7:S	0.58%	0.60%	0.00%	0.00%	0.62%	0.00%	0.00%	0.00%	0.00%	0.02%	0.00%	0.00%	1.29%	0.00%	0.01%	96.28%	0.37%	0.01%	0.01%	0.21%
8:G	0.14%	0.00%	0.01%	0.67%	0.00%	97.90%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.86%	0.00%	0.00%	0.16%	0.24%	0.00%
9:A	88.65%	0.00%	0.17%	0.00%	0.01%	0.40%	0.01%	0.04%	0.00%	0.02%	0.00%	0.01%	2.82%	0.00%	0.01%	1.15%	6.22%	0.49%	0.00%	0.00%
10:E	1.20%	0.00%	2.56%	91.11%	0.00%	1.89%	0.03%	0.00%	1.30%	0.01%	0.01%	0.04%	0.02%	1.25%	0.04%	0.01%	0.04%	0.45%	0.00%	0.01%
11:V	1.89%	0.00%	0.02%	1.54%	0.01%	1.76%	0.00%	0.12%	0.03%	2.81%	3.21%	0.00%	0.01%	0.00%	0.03%	0.02%	0.05%	88.50%	0.01%	0.00%
12:K	0.03%	0.00%	0.03%	1.71%	0.00%	0.06%	0.01%	0.06%	86.92%	0.02%	2.32%	0.81%	0.01%	1.19%	5.03%	0.05%	1.69%	0.03%	0.01%	0.00%
13:K	0.02%	0.00%	0.02%	1.70%	0.00%	0.08%	0.00%	0.04%	88.74%	0.02%	2.13%	0.37%	0.01%	1.07%	4.22%	0.03%	1.51%	0.03%	0.01%	0.00%
14:P	1.31%	0.04%	0.00%	0.00%	0.03%	0.01%	0.19%	0.01%	0.00%	0.51%	0.00%	0.02%	92.89%	0.01%	0.42%	3.15%	1.37%	0.03%	0.00%	0.01%
15:G	0.56%	0.00%	0.02%	2.62%	0.00%	94.99%	0.00%	0.00%	0.02%	0.01%	0.01%	0.00%	0.01%	0.02%	0.84%	0.01%	0.02%	0.63%	0.23%	0.00%
16:S	0.65%	0.19%	0.01%	0.00%	0.41%	0.00%	0.01%	0.00%	0.00%	0.02%	0.00%	0.01%	1.56%	0.00%	0.00%	96.50%	0.33%	0.01%	0.00%	0.29%
17:S	0.47%	0.01%	0.00%	0.00%	0.01%	0.02%	0.00%	0.00%	0.00%	0.79%	0.00%	0.00%	1.30%	0.00%	0.01%	96.50%	0.21%	0.01%	0.67%	0.00%
18:V	1.88%	0.00%	0.02%	1.52%	0.00%	1.81%	0.00%	0.12%	0.04%	2.73%	3.12%	0.00%	0.02%	0.01%	0.03%	0.02%	0.06%	88.60%	0.01%	0.00%
19:K	0.02%	0.00%	0.04%	1.79%	0.00%	0.02%	0.02%	0.03%	92.51%	0.01%	0.29%	2.13%	0.01%	1.22%	1.11%	0.07%	0.72%	0.01%	0.00%	0.00%
20:V	2.57%	0.00%	0.99%	0.01%	0.05%	1.50%	0.00%	0.24%	0.00%	0.18%	0.01%	0.01%	0.01%	0.00%	0.00%	0.01%	0.01%	94.39%	0.00%	0.00%
21:S	0.97%	0.66%	0.01%	0.00%	0.70%	0.01%	0.02%	0.01%	0.00%	0.07%	0.00%	0.01%	2.61%	0.00%	0.01%	94.08%	0.41%	0.01%	0.01%	0.43%
22:C	0.01%	88.83%	0.05%	0.00%	0.94%	0.72%	0.11%	0.00%	0.00%	0.10%	0.00%	0.06%	0.03%	0.00%	0.60%	2.38%	0.01%	0.01%	1.95%	4.19%
23:K	0.14%	0.00%	0.01%	2.27%	0.00%	0.07%	0.00%	0.02%	81.15%	0.05%	2.35%	0.32%	0.10%	1.16%	5.21%	0.07%	7.01%	0.05%	0.02%	0.00%
24:A	81.37%	0.01%	0.29%	0.00%	0.01%	0.69%	0.01%	0.06%	0.00%	0.03%	0.00%	0.02%	4.58%	0.00%	0.01%	2.10%	10.24%	0.58%	0.00%	0.00%
25:S	1.04%	4.23%	0.02%	0.00%	3.48%	0.02%	0.03%	0.02%	0.00%	0.13%	0.00%	0.02%	1.05%	0.00%	0.01%	88.72%	0.24%	0.03%	0.03%	0.94%
26:G	0.62%	0.00%	0.02%	1.56%	0.00%	95.60%	0.00%	0.01%	0.02%	0.01%	0.00%	0.00%	0.01%	0.01%	1.84%	0.02%	0.02%	0.26%	0.00%	0.00%
27:G	0.53%	0.24%	1.12%	0.12%	0.00%	96.60%	0.01%	0.01%	0.00%	0.00%	0.00%	0.02%	0.01%	0.00%	0.62%	0.29%	0.01%	0.39%	0.00%	0.02%
28:T	2.32%	0.01%	0.02%	0.00%	0.03%	0.02%	0.01%	2.01%	0.02%	0.02%	0.05%	0.58%	0.82%	0.00%	0.07%	2.64%	91.34%	0.05%	0.00%	0.01%
29:F	0.01%	1.31%	0.00%	0.00%	90.23%	0.01%	0.01%	0.17%	0.00%	6.51%	0.00%	0.00%	0.04%	0.00%	0.01%	1.02%	0.00%	0.41%	0.01%	0.24%
30:S	0.06%	1.38%	0.11%	0.00%	0.02%	2.54%	0.14%	1.35%	0.22%	0.04%	0.02%	5.30%	0.06%	0.00%	19.52%	66.30%	2.84%	0.05%	0.01%	0.06%
31:S	0.06%	0.67%	0.16%	0.00%	0.02%	1.19%	0.10%	1.49%	0.28%	0.02%	0.06%	6.61%	0.03%	0.00%	8.78%	77.20%	3.22%	0.03%	0.03%	0.07%
32:Y	0.01%	4.38%	0.77%	0.02%	4.87%	0.02%	2.92%	0.04%	0.04%	0.16%	0.00%	1.76%	0.05%	0.04%	0.07%	4.61%	0.05%	0.02%	0.02%	80.15%
33:A	84.34%	0.06%	0.58%	0.12%	0.07%	1.22%	0.03%	0.28%	0.00%	0.15%	0.00%	0.06%	2.88%	0.00%	0.09%	2.00%	6.47%	1.65%	0.00%	0.02%
34:I	0.08%	0.04%	0.03%	0.00%	5.10%	0.04%	0.02%	80.83%	0.02%	4.99%	1.33%	0.58%	0.06%	0.00%	0.10%	0.66%	1.25%	4.87%	0.00%	0.01%
35:S	0.09%	1.38%	0.17%	0.00%	0.03%	2.47%	0.15%	1.46%	0.35%	0.04%	0.06%	6.59%	0.05%	0.00%	9.65%	74.09%	3.25%	0.05%	0.04%	0.10%
36:W	0.00%	1.21%	0.00%	0.00%	0.01%	0.30%	0.00%	0.00%	0.00%	0.24%	0.00%	0.00%	0.01%	0.00%	1.87%	0.25%	0.00%	0.00%	96.09%	0.02%
37:V	1.54%	0.00%	0.02%	1.09%	0.01%	1.00%	0.00%	0.14%	0.05%	2.28%	2.36%	0.00%	0.04%	0.02%	0.03%	0.01%	0.06%	91.35%	0.00%	0.00%
38:R	0.00%	0.03%	0.00%	0.00%	0.00%	0.17%	0.03%	0.00%	0.02%	0.12%	0.00%	0.00%	0.45%	0.39%	98.65%	0.02%	0.00%	0.00%	0.11%	0.00%
39:Q	0.01%	0.00%	0.00%	0.29%	0.00%	0.01%	0.25%	0.00%	0.25%	0.35%	0.00%	0.00%	0.66%	96.83%	1.34%	0.00%	0.00%	0.00%	0.00%	0.00%
40:A	97.69%	0.00%	0.11%	0.02%	0.00%	0.44%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.34%	0.00%	0.00%	0.18%	0.83%	0.40%	0.00%	0.00%
41:P	0.24%	0.00%	0.00%	0.00%	0.00%	0.00%	0.25%	0.00%	0.00%	0.63%	0.00%	0.00%	97.44%	0.01%	0.47%	0.58%	0.35%	0.01%	0.00%	0.00%
42:G	0.26%	0.00%	0.02%	0.66%	0.00%	97.04%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	1.86%	0.02%	0.01%	0.11%	0.00%	0.00%
43:Q	0.01%	0.00%	0.03%	0.38%	0.00%	0.01%	9.97%	0.01%	0.28%	1.18%	0.00%	0.11%	1.02%	85.06%	1.88%	0.01%	0.01%	0.01%	0.00%	0.04%
44:G	0.18%	0.01%	0.05%	0.78%	0.00%	98.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.57%	0.03%	0.00%	0.19%	0.12%	0.00%
45:L	0.01%	0.00%	0.00%	0.00%	0.66%	0.00%	0.27%	0.33%	0.00%	94.60%	0.00%	0.00%	2.97%	0.01%	0.34%	0.02%	0.01%	0.77%	0.00%	0.00%
46:E	1.31%	0.00%	5.43%	87.62%	0.00%	2.02%	0.03%	0.00%	1.66%	0.02%	0.02%	0.03%	0.02%	1.23%	0.04%	0.01%	0.05%	0.49%	0.00%	0.01%
47:W	0.01%	2.63%	0.00%	0.03%	0.03%	1.11%	0.00%	0.00%	0.04%	0.60%	0.01%	0.00%	0.01%	0.01%	2.94%	0.94%	0.01%	0.01%	91.55%	0.05%
48:M	0.12%	0.00%	0.00%	0.06%	0.00%	0.04%	0.00%	0.57%	1.69%	3.63%	84.28%	0.00%	0.04%	0.02%	1.41%	0.02%	2.50%	5.61%	0.00%	0.00%
49:G	1.86%	0.00%	0.03%	3.05%	0.00%	91.20%	0.00%	0.03%	0.05%	0.02%	0.00%	0.00%	0.03%	0.01%	3.17%	0.05%	0.06%	0.44%	0.00%	0.00%
50:G	0.57%	0.02%	0.12%	2.54%	0.00%	95.15%	0.00%	0.00%	0.02%	0.02%	0.01%	0.00%	0.01%	0.01%	0.74%	0.03%	0.01%	0.65%	0.10%	0.00%
51:I	0.03%	0.00%	0.01%	0.00%	0.64%	0.02%	0.00%	92.48%	0.02%	1.21%	0.75%	0.29%	0.02%	0.00%	0.12%	0.94%	1.23%	2.24%	0.00%	0.00%
52:I	0.06%	0.02%	0.01%	0.00%	1.86%	0.03%	0.01%	86.94%	0.03%	2.74%	1.31%	0.41%	0.04%	0.00%	0.07%	0.05%	1.64%	4.15%	0.00%	0.00%
53:P	0.33%	0.01%	0.00%	0.00%	0.01%	0.00%	0.13%	0.01%	0.00%	0.35%	0.00%	0.00%	97.16%	0.00%	0.26%	1.12%	0.59%	0.01%	0.00%	0.00%
54:I	0.07%	0.03%	0.02%	0.00%	5.02%	0.03%	0.01%	78.93%	0.03%	5.12%	3.70%	0.32%	0.04%	0.00%	0.07%	0.63%	1.14%	4.81%	0.00%	0.01%
55:F	0.01%	0.89%	0.00%	0.00%	89.49%	0.00%	0.01%	0.33%	0.00%	5.54%	0.00%	0.01%	0.08%	0.00%	0.01%	2.96%	0.01%	0.35%	0.01%	0.29%
56:G	5.68%	0.37%	8.72%	0.59%	0.03%	80.70%	0.05%	0.07%	0.00%	0.05%	0.00%	0.08%	0.12%	0.00%	0.41%	1.07%	0.30%	1.72%	0.01%	0.03%
57:T	4.79%	0.00%	0.00%	0.07%	0.01%	0.04%	0.00%	4.63%	1.06%	0.30%	0.15%	0.06%	1.96%	0.02%	0.95%	2.57%	83.29%	0.10%	0.00%	0.00%
58:A	69.50%	0.00%	0.34%	14.66%	0.00%	2.61%	0.00%	0.31%	0.15%	0.20%	0.01%	0.00%	2.79%	0.05%	0.19%	1.35%	5.20%	2.62%	0.00%	0.00%
59:N	0.02%	0.10%	3.47%	0.16%	0.06%	0.04%	3.08%	1.02%	4.40%	0.03%	0.06%	81.16%	0.02%	0.11%	0.21%	1.84%	1.22%	0.02%	0.00%	2.94%
60:Y	0.01%	4.82%	0.99%	0.01%	2.62%	0.07%	2.89%	0.01%	0.02%	0.15%	0.00%	1.54%	0.03%	0.03%	0.07%	2.24%	0.03%	0.01%	0.01%	84.46%
61:A	79.38%	0.00%	0.06%	3.76%	0.00%	0.70%	0.00%	0.11%	0.07%	0.06%	0.00%	0.00%	3.34%	0.03%	0.06%	2.15%	9.60%	0.67%	0.00%	0.00%
62:Q	0.02%	0.00%	0.03%	2.17%	0.00%	0.02%	0.87%	0.00%	0.62%	1.06%	0.01%	0.01%	0.80%	92.36%	1.99%	0.01%	0.01%	0.02%	0.00%	0.00%
63:K	0.04%	0.00%	0.04%	1.61%	0.00%	0.06%	0.04%	0.18%	86.99%	0.04%	2.02%	3.59%	0.02%	0.99%	2.33%	0.13%	1.88%	0.03%	0.01%	0.00%
64:F	0.02%	1.24%	0.00%	0.00%	86.00%	0.01%														