

	A	C	D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	V	W	Y
1:Q	0.78%	0.04%	0.72%	6.09%	0.05%	0.79%	5.22%	0.15%	6.15%	7.24%	0.64%	0.65%	6.79%	54.38%	7.56%	0.52%	0.78%	0.77%	0.37%	0.32%
2:V	6.15%	0.05%	0.36%	4.62%	0.62%	4.30%	0.03%	4.02%	0.92%	9.95%	6.89%	0.09%	0.49%	0.22%	0.89%	0.53%	1.52%	58.25%	0.09%	0.01%
3:Q	0.21%	0.15%	0.56%	2.03%	0.10%	0.32%	12.88%	0.24%	7.03%	4.37%	0.20%	1.76%	3.55%	57.44%	6.91%	0.50%	0.65%	0.26%	0.55%	0.30%
4:L	1.49%	0.05%	0.06%	0.85%	1.16%	0.76%	0.08%	1.44%	0.77%	61.14%	6.67%	0.05%	3.06%	1.05%	2.27%	2.03%	1.09%	15.46%	0.52%	0.01%
5:V	5.95%	0.04%	0.39%	4.56%	0.48%	4.37%	0.04%	3.59%	0.93%	10.34%	6.77%	0.09%	0.66%	0.32%	0.90%	0.46%	1.64%	58.41%	0.08%	0.01%
6:Q	0.46%	0.08%	0.27%	1.34%	0.09%	0.47%	7.94%	0.10%	4.74%	11.41%	0.48%	0.92%	7.38%	52.02%	8.37%	0.90%	0.72%	0.69%	1.43%	0.19%
7:S	2.54%	3.04%	0.06%	0.01%	3.00%	0.12%	0.09%	0.12%	0.01%	0.60%	0.01%	0.07%	5.96%	0.01%	0.20%	80.49%	2.53%	0.16%	0.14%	0.84%
8:G	0.94%	0.02%	0.17%	4.08%	0.00%	88.22%	0.01%	0.01%	0.16%	0.12%	0.07%	0.01%	0.05%	0.13%	3.68%	0.08%	0.11%	1.00%	1.14%	0.00%
9:A	54.59%	0.11%	0.61%	0.08%	0.14%	1.57%	0.13%	0.74%	0.02%	0.42%	0.02%	0.23%	11.60%	0.02%	0.21%	5.22%	22.60%	1.64%	0.00%	0.04%
10:E	4.11%	0.02%	9.03%	63.31%	0.02%	8.19%	0.59%	0.09%	4.00%	0.42%	0.25%	0.60%	0.50%	4.70%	0.81%	0.25%	0.76%	2.12%	0.06%	0.16%
11:V	7.14%	0.01%	0.45%	5.81%	0.19%	5.83%	0.01%	1.86%	0.59%	10.15%	8.96%	0.04%	0.35%	0.15%	0.70%	0.48%	1.12%	55.96%	0.19%	0.00%
12:K	0.68%	0.02%	0.53%	6.13%	0.02%	1.21%	0.24%	1.11%	51.00%	0.64%	6.67%	2.72%	0.34%	4.50%	15.32%	0.72%	7.19%	0.65%	0.29%	0.04%
13:K	0.63%	0.01%	0.37%	6.56%	0.01%	1.60%	0.11%	0.64%	55.23%	0.59%	6.10%	1.44%	0.28%	3.61%	15.20%	0.52%	6.13%	0.62%	0.34%	0.02%
14:P	5.15%	0.50%	0.07%	0.02%	0.49%	0.15%	0.58%	0.25%	0.05%	1.77%	0.02%	0.19%	67.81%	0.10%	1.34%	14.01%	6.98%	0.35%	0.06%	0.11%
15:G	0.63%	0.02%	0.11%	2.91%	0.00%	90.18%	0.01%	0.01%	0.13%	0.09%	0.05%	0.01%	0.04%	0.09%	3.74%	0.07%	0.08%	0.75%	1.09%	0.00%
16:A	88.63%	0.01%	1.46%	0.07%	0.02%	1.23%	0.03%	0.10%	0.02%	0.03%	0.01%	0.09%	1.88%	0.00%	0.02%	1.14%	3.39%	1.86%	0.00%	0.01%
17:S	1.90%	0.26%	0.02%	0.14%	0.35%	0.07%	0.02%	0.08%	0.02%	2.90%	0.01%	0.01%	7.83%	0.06%	0.16%	84.31%	1.54%	0.08%	0.14%	0.10%
18:V	3.77%	0.01%	0.30%	3.93%	0.17%	3.68%	0.02%	1.42%	0.30%	12.41%	6.52%	0.02%	0.46%	0.23%	0.49%	0.24%	0.60%	65.34%	0.08%	0.00%
19:K	0.45%	0.03%	0.80%	6.82%	0.02%	0.73%	0.47%	0.84%	62.24%	0.29%	2.20%	6.21%	0.25%	4.87%	7.45%	1.19%	4.72%	0.23%	0.12%	0.08%
20:V	10.31%	0.27%	5.60%	0.43%	4.45%	5.65%	0.33%	13.30%	0.13%	7.93%	0.59%	1.11%	2.41%	0.03%	0.35%	2.34%	5.89%	38.76%	0.01%	0.12%
21:S	3.88%	9.04%	0.83%	0.03%	10.73%	0.46%	1.09%	0.21%	0.05%	3.25%	0.03%	0.42%	3.73%	0.06%	0.52%	57.25%	0.98%	0.80%	0.67%	5.99%
22:C	0.37%	55.52%	1.00%	0.06%	3.65%	3.26%	2.07%	0.12%	0.10%	1.57%	0.01%	0.86%	0.84%	0.10%	3.65%	9.91%	0.24%	0.19%	5.21%	11.29%
23:K	2.17%	0.02%	0.19%	7.32%	0.01%	1.35%	0.10%	0.28%	36.46%	0.93%	5.87%	0.80%	1.82%	4.15%	16.43%	1.30%	19.55%	0.81%	0.42%	0.02%
24:A	67.81%	0.01%	0.50%	3.55%	0.04%	1.42%	0.02%	0.29%	0.37%	0.33%	0.04%	0.07%	4.46%	0.08%	0.28%	9.78%	10.02%	0.89%	0.01%	0.01%
25:X	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
26:X	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
27:X	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
28:X	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
29:X	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
30:X	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
31:X	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
32:G	5.74%	0.06%	3.36%	11.83%	0.05%	65.43%	0.14%	0.39%	0.77%	0.51%	0.04%	0.22%	0.59%	0.42%	6.53%	0.55%	1.08%	2.18%	0.05%	0.05%
33:Y	0.61%	9.57%	10.33%	0.91%	7.57%	1.53%	13.62%	0.91%	1.16%	2.59%	0.06%	9.46%	1.07%	0.83%	2.11%	9.06%	0.85%	0.62%	0.30%	26.83%
34:T	11.17%	0.32%	0.41%	0.04%	0.52%	0.54%	0.19%	5.58%	0.39%	0.60%	0.66%	1.80%	8.03%	0.02%	0.87%	10.44%	56.92%	1.29%	0.03%	0.20%
35:F	0.21%	4.38%	0.10%	0.01%	61.03%	0.16%	0.25%	0.90%	0.01%	22.69%	0.08%	0.08%	0.97%	0.03%	0.35%	4.90%	0.10%	2.39%	0.21%	1.13%
36:T	8.94%	0.21%	0.30%	0.04%	0.40%	0.41%	0.17%	5.26%	0.29%	0.64%	0.31%	1.75%	6.35%	0.02%	1.43%	7.85%	64.44%	1.09%	0.01%	0.11%
37:S	1.24%	2.51%	1.57%	0.22%	0.41%	4.93%	1.33%	3.85%	2.77%	0.61%	0.49%	12.59%	0.93%	0.21%	22.08%	32.28%	10.08%	0.74%	0.32%	0.83%
38:Y	0.40%	12.38%	4.79%	0.27%	8.65%	0.68%	11.18%	0.43%	0.74%	3.25%	0.04%	5.41%	1.16%	0.59%	1.51%	10.16%	0.63%	0.34%	0.67%	36.73%
39:Y	0.50%	12.82%	3.09%	0.42%	14.13%	0.52%	7.78%	0.46%	0.32%	3.54%	0.03%	3.29%	1.56%	0.65%	1.17%	17.21%	0.75%	0.33%	0.66%	30.77%
40:M	1.79%	0.15%	0.11%	0.81%	3.99%	0.93%	0.08%	16.17%	1.72%	28.07%	16.05%	0.26%	2.32%	0.45%	3.08%	2.25%	6.50%	14.67%	0.54%	0.03%
41:H	0.82%	0.76%	3.27%	0.35%	0.94%	0.38%	44.14%	0.69%	2.10%	6.84%	0.11%	7.11%	9.24%	7.89%	7.96%	2.29%	1.44%	0.77%	0.13%	2.78%
42:W	0.05%	5.22%	0.03%	0.10%	0.18%	5.23%	0.05%	0.01%	0.03%	1.15%	0.02%	0.02%	0.10%	0.05%	7.30%	1.56%	0.03%	0.05%	78.50%	0.32%
43:V	5.53%	0.01%	0.33%	4.03%	0.21%	4.35%	0.03%	1.81%	0.87%	9.90%	6.16%	0.07%	0.89%	0.46%	0.74%	0.54%	1.35%	62.66%	0.06%	0.00%
44:R	0.07%	0.68%	0.02%	0.11%	0.02%	1.63%	0.51%	0.03%	0.32%	0.66%	0.01%	0.06%	2.12%	1.37%	90.02%	0.43%	0.10%	0.03%	1.79%	0.02%
45:Q	0.10%	0.00%	0.04%	1.44%	0.00%	0.16%	1.18%	0.00%	1.17%	2.01%	0.03%	0.06%	3.25%	83.72%	6.46%	0.11%	0.08%	0.06%	0.10%	0.02%
46:A	87.80%	0.03%	0.71%	0.27%	0.03%	2.19%	0.02%	0.12%	0.02%	0.04%	0.01%	0.08%	1.32%	0.00%	0.04%	1.29%	3.81%	2.20%	0.00%	0.01%
47:P	0.92%	0.09%	0.05%	0.01%	0.07%	0.08%	1.01%	0.08%	0.01%	2.75%	0.00%	0.04%	88.15%	0.29%	1.93%	2.76%	1.61%	0.11%	0.01%	0.03%
48:G	1.19%	0.08%	0.42%	2.95%	0.01%	84.93%	0.02%	0.09%	0.18%	0.08%	0.01%	0.03%	0.11%	0.09%	8.62%	0.47%	0.21%	0.46%	0.04%	0.01%
49:Q	0.15%	0.09%	0.58%	1.49%	0.09%	0.21%	25.40%	0.19%	1.01%	4.75%	0.02%	1.39%	4.90%	49.79%	8.50%	0.47%	0.27%	0.23%	0.02%	0.47%
50:G	0.93%	0.23%	0.89%	2.90%	0.01%	88.82%	0.02%	0.04%	0.09%	0.09%	0.04%	0.03%	0.06%	0.07%	3.72%	0.62%	0.11%	0.86%	0.47%	0.01%
51:L	0.22%	0.11%	0.05%	0.02%	2.54%	0.07%	1.27%	1.77%	0.01%	73.78%	0.05%	0.06%	14.33%	0.22%	1.76%	0.50%	0.34%	2.86%	0.00%	0.04%
52:E	4.65%	0.03%	17.37%	53.99%	0.04%	8.46%	0.58%	0.12%	4.39%	0.49%	0.33%	0.58%	0.47%	3.98%	0.77%	0.28%	0.82%	2.46%	0.07%	0.14%
53:W	0.26%	8.15%	0.13%	0.49%	0.48%	4.87%	0.13%	0.06%	0.47%	2.27%	0.18%	0.09%	0.28%	0.16%	10.44%	4.11%	0.27%	0.33%	66.11%	0.72%
54:M	1.91%	0.00%	0.02%	1.16%	0.09%	0.87%	0.01%	2.90%	5.26%	13.68%	42.09%	0.09%	0.85%	0.48%	5.77%	0.50%	8.25%	15.94%	0.13%	0.00%
55:G	4.05%	0.06%	2.58%	9.69%	0.04%	63.26%	0.09%	0.61%	1.01%	0.42%	0.08%	0.27%	0.32%	0.26%	11.26%	0.55%	0.88%	4.50%	0.05%	0.02%
56:I	1.11%	0.06%	0.25%	1.33%	1.63%	1.21%	0.20%	30.56%	3.67%	22.71%	6.42%	1.12%	1.76%	0.93%	6.32%	2.20%	7.31%	11.14%	0.04%	0.04%
57:I	1.50%	0.35%	0.62%	0.09%	6.91%	0.99%	0.31%	42.06%	0.46%	12.79%	2.53%	1.72%	0.84%	0.05%	1.86%	2.90%	4.68%	19.12%	0.05%	0.18%
58:N	0.60%	0.68%	5.90%	1.26%	0.35%	1.06%	5.41%	3.25%	14.72%	0.60%	0.52%	44.04%	0.61%	0.90%	4.13%	6.91%	6.41%	0.47%	0.06%	2.13%
59:P	3.53%	0.39%	0.13%	0.04%	0.52%	0.21%	1.31%	0.36%	0.02%	3.53%	0.02%	0.14%	75.96%	0.19%	2.37%	6.68%	3.93%	0.52%	0.02%	0.13%
60:S	1.14%	7.52%	1.53%	0.21%	1.03%	10.74%	0.98%	4.05%	0.74%	0.99%	0.15%	4.99%	0.97%	0.13%	13.88%	44.05%	4.94%	0.89%	0.41%	0.67%
61:G	6.96%	2.88%	9.57%	1.29%	0.36%	61.54%	0.91%	0.55%	0.11%	0.45%	0.01%	1.10%	0.56%	0.10%	3.60%	5.97%	0.92%	2.46%	0.15%	0.51%
62:G	13.73%	1.59%	16.86%	3.41%	0.66%	41.49%	1.90%	0.98%	0.29%	0.98%	0.06%	2.19%	1.07%	0.24%	3.02%	3.68%	2.02%	4.73%	0.19%	0.92%
63:S	1.48%	2.26%	2.71%	0.70%	1.19%	10.90%	1.20%	5.92%	2.12%	1.39%	0.40%	9.02%	0.65%	0.20%	33.61%	16.71%	6.08%	2.01%	0.52%	0.96%
64:T	6.37%	0																		