

	A	C	D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	V	W	Y
1:Q	0.63%	0.03%	0.57%	5.76%	0.03%	0.63%	4.87%	0.11%	5.81%	6.70%	0.54%	0.55%	6.37%	58.21%	6.94%	0.41%	0.62%	0.63%	0.31%	0.27%
2:V	5.66%	0.04%	0.29%	4.28%	0.49%	3.90%	0.02%	3.53%	0.76%	9.27%	6.81%	0.07%	0.39%	0.18%	0.73%	0.39%	1.21%	61.90%	0.07%	0.00%
3:Q	0.15%	0.10%	0.44%	1.75%	0.07%	0.24%	12.43%	0.18%	6.49%	3.89%	0.16%	1.47%	3.11%	61.64%	6.09%	0.37%	0.50%	0.20%	0.46%	0.25%
4:L	1.23%	0.03%	0.04%	0.70%	0.97%	0.63%	0.06%	1.19%	0.68%	64.06%	6.51%	0.04%	2.88%	0.99%	1.93%	1.68%	0.89%	15.05%	0.43%	0.01%
5:V	5.47%	0.03%	0.30%	4.18%	0.40%	3.94%	0.02%	3.16%	0.77%	9.53%	6.60%	0.07%	0.53%	0.26%	0.73%	0.36%	1.35%	62.23%	0.06%	0.00%
6:Q	0.36%	0.06%	0.21%	1.17%	0.06%	0.37%	7.64%	0.07%	4.35%	10.68%	0.39%	0.77%	6.85%	55.94%	7.90%	0.72%	0.55%	0.57%	1.19%	0.16%
7:S	2.30%	2.72%	0.05%	0.00%	2.73%	0.10%	0.08%	0.10%	0.00%	0.47%	0.01%	0.05%	5.36%	0.01%	0.16%	82.70%	2.19%	0.13%	0.11%	0.75%
8:G	0.81%	0.02%	0.13%	3.53%	0.00%	89.72%	0.00%	0.00%	0.13%	0.09%	0.05%	0.01%	0.04%	0.10%	3.32%	0.06%	0.09%	0.88%	1.01%	0.00%
9:A	58.40%	0.09%	0.55%	0.07%	0.11%	1.45%	0.11%	0.61%	0.01%	0.35%	0.01%	0.19%	10.61%	0.01%	0.16%	4.75%	20.94%	1.56%	0.00%	0.04%
10:E	3.85%	0.02%	8.36%	66.58%	0.02%	7.44%	0.47%	0.07%	3.79%	0.33%	0.21%	0.51%	0.41%	4.38%	0.63%	0.19%	0.62%	1.93%	0.05%	0.15%
11:V	6.55%	0.01%	0.36%	5.34%	0.15%	5.45%	0.01%	1.58%	0.48%	9.48%	8.69%	0.03%	0.27%	0.11%	0.58%	0.37%	0.90%	59.48%	0.16%	0.00%
12:K	0.54%	0.01%	0.43%	5.65%	0.01%	0.98%	0.20%	0.94%	54.87%	0.51%	6.44%	2.54%	0.26%	4.13%	14.53%	0.60%	6.60%	0.50%	0.23%	0.03%
13:K	0.49%	0.01%	0.30%	6.07%	0.01%	1.30%	0.09%	0.53%	59.06%	0.46%	5.84%	1.32%	0.22%	3.30%	14.16%	0.43%	5.61%	0.52%	0.28%	0.01%
14:P	4.76%	0.40%	0.06%	0.02%	0.41%	0.12%	0.54%	0.19%	0.03%	1.62%	0.02%	0.17%	70.86%	0.08%	1.24%	12.70%	6.36%	0.29%	0.04%	0.09%
15:G	0.55%	0.02%	0.09%	2.58%	0.00%	91.33%	0.00%	0.00%	0.10%	0.07%	0.04%	0.00%	0.03%	0.07%	3.35%	0.05%	0.06%	0.64%	1.00%	0.00%
16:A	89.96%	0.01%	1.31%	0.06%	0.01%	1.10%	0.02%	0.08%	0.01%	0.03%	0.01%	0.07%	1.66%	0.00%	0.01%	0.97%	3.02%	1.64%	0.00%	0.01%
17:S	1.76%	0.22%	0.02%	0.12%	0.29%	0.05%	0.01%	0.06%	0.02%	2.64%	0.01%	0.01%	6.98%	0.05%	0.12%	86.01%	1.37%	0.07%	0.12%	0.08%
18:V	3.53%	0.00%	0.24%	3.59%	0.13%	3.34%	0.01%	1.19%	0.25%	11.27%	6.22%	0.01%	0.35%	0.18%	0.39%	0.19%	0.50%	68.52%	0.06%	0.00%
19:K	0.31%	0.02%	0.62%	6.43%	0.01%	0.51%	0.37%	0.50%	69.29%	0.17%	1.05%	6.04%	0.17%	4.62%	5.01%	1.00%	3.59%	0.14%	0.07%	0.06%
20:V	9.84%	0.03%	3.89%	0.24%	0.36%	4.78%	0.04%	1.33%	0.04%	1.17%	0.19%	0.11%	0.13%	0.00%	0.06%	0.16%	0.33%	77.28%	0.00%	0.02%
21:S	3.48%	2.20%	0.12%	0.00%	2.34%	0.13%	0.27%	0.09%	0.01%	1.00%	0.01%	0.12%	9.39%	0.01%	0.23%	77.22%	1.54%	0.23%	0.13%	1.48%
22:C	0.29%	60.14%	0.82%	0.04%	3.31%	2.93%	1.61%	0.08%	0.07%	1.30%	0.01%	0.73%	0.63%	0.06%	2.68%	8.93%	0.18%	0.14%	5.07%	11.00%
23:K	1.69%	0.01%	0.19%	7.05%	0.01%	1.13%	0.10%	0.24%	45.63%	0.70%	4.98%	0.97%	1.31%	4.00%	14.07%	1.02%	15.96%	0.60%	0.32%	0.03%
24:A	48.20%	0.14%	1.17%	0.08%	0.14%	1.68%	0.13%	0.77%	0.03%	0.32%	0.02%	0.42%	11.52%	0.01%	0.15%	7.03%	26.62%	1.51%	0.00%	0.06%
25:S	2.76%	12.17%	0.24%	0.02%	10.03%	0.28%	0.35%	0.23%	0.02%	1.94%	0.01%	0.20%	4.19%	0.03%	0.33%	62.60%	1.05%	0.48%	0.48%	2.58%
26:G	5.40%	0.05%	2.82%	11.31%	0.03%	68.30%	0.11%	0.32%	0.68%	0.40%	0.04%	0.18%	0.49%	0.36%	5.97%	0.43%	0.92%	2.13%	0.04%	0.03%
27:Y	0.49%	9.48%	9.91%	0.77%	7.36%	1.28%	13.29%	0.78%	1.04%	2.11%	0.04%	9.67%	0.86%	0.68%	1.79%	8.42%	0.72%	0.49%	0.26%	30.55%
28:F	10.43%	0.26%	0.32%	0.03%	0.42%	0.43%	0.14%	5.32%	0.33%	0.47%	0.57%	1.69%	7.43%	0.01%	0.73%	9.75%	60.45%	1.05%	0.02%	0.16%
29:T	0.15%	4.09%	0.08%	0.01%	64.90%	0.12%	0.20%	0.81%	0.01%	20.70%	0.06%	0.06%	0.76%	0.02%	0.29%	4.38%	0.07%	2.10%	0.16%	1.03%
30:T	7.80%	0.20%	0.38%	0.02%	0.32%	0.49%	0.15%	4.29%	0.19%	0.45%	0.10%	1.60%	5.71%	0.01%	0.54%	8.03%	68.54%	1.10%	0.01%	0.10%
31:G	11.20%	0.43%	20.43%	1.35%	0.06%	57.17%	0.48%	0.15%	0.07%	0.20%	0.02%	0.43%	0.20%	0.05%	1.02%	1.07%	0.41%	5.06%	0.02%	0.14%
32:Y	0.26%	12.37%	3.10%	0.16%	8.34%	0.48%	10.32%	0.27%	0.54%	2.89%	0.02%	4.34%	0.93%	0.45%	1.15%	9.88%	0.47%	0.18%	0.56%	43.29%
33:V	0.42%	12.33%	2.98%	0.36%	13.74%	0.43%	7.42%	0.39%	0.27%	2.99%	0.02%	3.18%	1.27%	0.54%	0.96%	16.23%	0.62%	0.27%	0.58%	34.99%
34:M	1.54%	0.12%	0.08%	0.69%	3.60%	0.76%	0.06%	17.15%	1.65%	27.35%	18.76%	0.22%	1.98%	0.37%	2.77%	1.86%	6.28%	14.29%	0.44%	0.03%
35:H	0.67%	0.63%	2.96%	0.28%	0.81%	0.30%	47.98%	0.58%	1.86%	6.50%	0.09%	7.08%	8.78%	7.46%	7.51%	1.94%	1.18%	0.63%	0.10%	2.64%
36:W	0.04%	4.73%	0.02%	0.07%	0.16%	4.62%	0.03%	0.00%	0.02%	0.99%	0.02%	0.01%	0.08%	0.04%	6.45%	1.35%	0.02%	0.04%	81.03%	0.27%
37:V	5.13%	0.01%	0.27%	3.78%	0.18%	3.93%	0.02%	1.57%	0.73%	8.91%	6.01%	0.05%	0.71%	0.37%	0.59%	0.42%	1.10%	66.16%	0.05%	0.00%
38: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%
39: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%
40: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%
41: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%
42: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%
43: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%
44: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%
45: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%
46: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%
47: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%
48: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%
49:R	0.05%	0.55%	0.01%	0.09%	0.01%	1.37%	0.45%	0.02%	0.27%	0.59%	0.00%	0.04%	1.91%	1.22%	91.45%	0.34%	0.08%	0.02%	1.51%	0.01%
50:Q	0.08%	0.00%	0.03%	1.30%	0.00%	0.13%	1.05%	0.00%	1.04%	1.74%	0.03%	0.05%	2.87%	85.58%	5.82%	0.08%	0.07%	0.04%	0.07%	0.01%
51:A	89.19%	0.03%	0.61%	0.23%	0.02%	1.94%	0.01%	0.09%	0.02%	0.03%	0.00%	0.06%	1.23%	0.00%	0.03%	1.11%	3.45%	1.92%	0.00%	0.01%
52:P	0.83%	0.07%	0.04%	0.01%	0.06%	0.07%	0.90%	0.07%	0.00%	2.48%	0.00%	0.03%	89.40%	0.24%	1.77%	2.45%	1.46%	0.09%	0.00%	0.02%
53:G	1.07%	0.06%	0.34%	2.65%	0.00%	86.67%	0.02%	0.07%	0.14%	0.07%	0.01%	0.03%	0.09%	0.08%	7.73%	0.37%	0.16%	0.41%	0.03%	0.01%
54:Q	0.12%	0.07%	0.48%	1.37%	0.06%	0.16%	24.75%	0.15%	0.91%	4.33%	0.01%	1.19%	4.39%	53.16%	7.71%	0.35%	0.20%	0.18%	0.01%	0.41%
55:G	0.82%	0.19%	0.73%	2.63%	0.00%	90.28%	0.02%	0.03%	0.08%	0.07%	0.03%	0.02%	0.04%	0.05%	3.19%	0.51%	0.08%	0.77%	0.45%	0.01%
56:L	0.17%	0.08%	0.04%	0.01%	2.38%	0.06%	1.16%	1.56%	0.01%	76.55%	0.04%	0.05%	12.85%	0.18%	1.56%	0.38%	0.26%	2.64%	0.00%	0.03%
57:E	4.31%	0.02%	16.41%	57.60%	0.03%	7.66%	0.46%	0.08%	4.24%	0.40%	0.28%	0.48%	0.38%	3.76%	0.63%	0.22%	0.69%	2.17%	0.05%	0.11%
58:W	0.21%	7.72%	0.09%	0.42%	0.39%	4.42%	0.09%	0.04%	0.40%	2.09%	0.15%	0.07%	0.22%	0.13%	9.61%	3.73%	0.22%	0.26%	69.11%	0.62%
59:M	1.61%	0.00%	0.02%	0.96%	0.08%	0.70%	0.01%	3.51%	5.02%	12.56%	45.51%	0.08%	0.68%	0.40%	5.27%	0.41%	7.78%	15.28%	0.10%	0.00%
60:G	8.91%	0.07%	3.85%	17.73%	0.04%	51.73%	0.11%	0.73%	1.52%	0.64%	0.10%	0.33%	0.71%	0.43%	7.58%	0.94%	1.69%	2.81%	0.07%	0.03%
61:W	0.16%	6.19%	0.12%	0.35%	0.51%	6.37%	0.34%	0.05%	0.21%	3.59%	0.11%	0.13%	0.54%	0.43%	14.00%	4.21%	0.15%	0.26%	61.28%	0.97%
62:I	0.60%	0.07%	0.15%	0.04%	1.76%	0.25%	0.05%	69.50%	0.44%	5.39%	3.02%	1.10%	0.29%	0.02%	1.44%	2.56%	4.90%	8.39%	0.01%	0.02%
63:N	0.48%	0.56%	5.44%	1.04%	0.28%	0.84%	5.17%	2.88%	14.42%	0.49%	0.43%	48.68%	0.47%	0.74%	3.51%	6.38%	5.76%	0.37%	0.04%	2.04%
64:P	3.10%	0.33%	0.10%	0.0																