

	A	C	D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	V	W	Y
1:Q	0.66%	0.04%	0.62%	5.79%	0.03%	0.65%	4.94%	0.11%	5.85%	6.75%	0.53%	0.57%	6.43%	57.73%	6.99%	0.43%	0.66%	0.64%	0.32%	0.27%
2:V	5.74%	0.04%	0.31%	4.33%	0.51%	3.91%	0.02%	3.60%	0.80%	9.38%	6.78%	0.07%	0.40%	0.19%	0.75%	0.42%	1.26%	61.41%	0.07%	0.00%
3:Q	0.16%	0.11%	0.46%	1.76%	0.08%	0.24%	12.56%	0.20%	6.57%	3.97%	0.16%	1.53%	3.13%	60.95%	6.25%	0.40%	0.52%	0.21%	0.46%	0.27%
4:L	1.28%	0.03%	0.05%	0.72%	0.98%	0.63%	0.06%	1.23%	0.68%	63.76%	6.53%	0.05%	2.90%	0.98%	1.99%	1.72%	0.90%	15.05%	0.43%	0.01%
5:V	5.52%	0.03%	0.32%	4.21%	0.41%	4.01%	0.03%	3.23%	0.78%	9.63%	6.59%	0.07%	0.54%	0.26%	0.76%	0.36%	1.38%	61.80%	0.06%	0.00%
6:Q	0.37%	0.06%	0.22%	1.20%	0.07%	0.39%	7.63%	0.08%	4.37%	10.81%	0.40%	0.78%	6.91%	55.49%	7.92%	0.74%	0.58%	0.60%	1.24%	0.15%
7:S	2.35%	2.77%	0.05%	0.00%	2.75%	0.10%	0.08%	0.11%	0.01%	0.48%	0.00%	0.06%	5.46%	0.01%	0.15%	82.39%	2.22%	0.12%	0.11%	0.78%
8:G	0.83%	0.02%	0.14%	3.66%	0.00%	89.44%	0.00%	0.00%	0.13%	0.09%	0.05%	0.00%	0.04%	0.11%	3.38%	0.06%	0.09%	0.90%	1.03%	0.00%
9:A	57.85%	0.09%	0.56%	0.06%	0.11%	1.49%	0.11%	0.63%	0.01%	0.36%	0.01%	0.20%	10.73%	0.01%	0.18%	4.79%	21.22%	1.57%	0.00%	0.04%
10:E	3.84%	0.02%	8.48%	66.13%	0.02%	7.54%	0.51%	0.07%	3.81%	0.35%	0.21%	0.52%	0.42%	4.39%	0.67%	0.21%	0.65%	1.97%	0.06%	0.15%
11:V	6.71%	0.01%	0.39%	5.43%	0.16%	5.52%	0.01%	1.60%	0.50%	9.56%	8.65%	0.03%	0.28%	0.12%	0.59%	0.38%	0.92%	58.97%	0.17%	0.00%
12:K	0.57%	0.01%	0.45%	5.71%	0.01%	1.02%	0.21%	0.98%	54.26%	0.51%	6.49%	2.58%	0.29%	4.19%	14.61%	0.62%	6.67%	0.54%	0.25%	0.03%
13:K	0.49%	0.01%	0.32%	6.10%	0.01%	1.34%	0.10%	0.54%	58.53%	0.49%	5.89%	1.34%	0.23%	3.36%	14.30%	0.43%	5.69%	0.53%	0.30%	0.01%
14:P	4.80%	0.42%	0.06%	0.02%	0.43%	0.13%	0.54%	0.20%	0.04%	1.61%	0.02%	0.17%	70.44%	0.09%	1.27%	12.95%	6.37%	0.29%	0.05%	0.10%
15:G	0.57%	0.02%	0.10%	2.61%	0.00%	91.17%	0.00%	0.00%	0.10%	0.07%	0.04%	0.00%	0.03%	0.08%	3.40%	0.05%	0.06%	0.67%	1.01%	0.00%
16:A	89.79%	0.01%	1.33%	0.06%	0.01%	1.13%	0.02%	0.09%	0.01%	0.03%	0.01%	0.07%	1.65%	0.00%	0.01%	1.01%	3.08%	1.66%	0.00%	0.01%
17:S	1.80%	0.22%	0.02%	0.13%	0.30%	0.05%	0.01%	0.07%	0.02%	2.66%	0.01%	0.01%	7.11%	0.05%	0.13%	85.75%	1.40%	0.07%	0.11%	0.08%
18:V	3.53%	0.01%	0.23%	3.66%	0.14%	3.37%	0.01%	1.24%	0.25%	11.44%	6.29%	0.02%	0.37%	0.19%	0.40%	0.21%	0.52%	68.06%	0.06%	0.00%
19:K	0.38%	0.02%	0.68%	6.38%	0.01%	0.59%	0.41%	0.72%	65.43%	0.23%	1.99%	5.99%	0.19%	4.53%	6.80%	1.04%	4.25%	0.19%	0.09%	0.06%
20:V	10.18%	0.23%	5.35%	0.36%	4.22%	5.62%	0.29%	13.03%	0.10%	7.69%	0.51%	0.95%	2.13%	0.02%	0.29%	2.02%	5.14%	41.74%	0.01%	0.11%
21:S	3.63%	8.75%	0.69%	0.02%	10.31%	0.38%	0.93%	0.18%	0.04%	2.79%	0.02%	0.36%	3.45%	0.04%	0.44%	60.01%	0.89%	0.66%	0.58%	5.83%
22:C	0.31%	58.70%	0.85%	0.04%	3.38%	3.02%	1.78%	0.09%	0.08%	1.34%	0.01%	0.77%	0.67%	0.08%	3.32%	9.16%	0.19%	0.16%	5.03%	11.05%
23:K	1.92%	0.01%	0.16%	6.95%	0.01%	1.13%	0.08%	0.24%	39.78%	0.79%	5.77%	0.79%	1.54%	3.90%	15.76%	1.10%	19.00%	0.69%	0.36%	0.02%
24:A	70.79%	0.01%	0.42%	3.25%	0.03%	1.31%	0.02%	0.24%	0.31%	0.27%	0.03%	0.06%	3.96%	0.06%	0.23%	8.97%	9.21%	0.80%	0.01%	0.01%
25:S	1.73%	12.38%	0.30%	0.04%	11.05%	0.75%	0.53%	0.56%	0.02%	2.33%	0.02%	0.24%	5.67%	0.05%	1.28%	57.41%	1.90%	0.73%	0.39%	2.63%
26:G	5.43%	0.05%	2.95%	11.44%	0.04%	67.77%	0.11%	0.34%	0.71%	0.44%	0.03%	0.18%	0.50%	0.36%	6.07%	0.45%	0.97%	2.09%	0.04%	0.04%
27:Y	0.52%	9.51%	9.95%	0.76%	7.42%	1.33%	13.35%	0.81%	1.04%	2.20%	0.04%	9.63%	0.90%	0.71%	1.83%	8.57%	0.73%	0.50%	0.27%	29.93%
28:T	10.58%	0.26%	0.33%	0.03%	0.44%	0.44%	0.15%	5.36%	0.34%	0.47%	0.57%	1.69%	7.53%	0.01%	0.74%	9.84%	59.95%	1.08%	0.02%	0.17%
29:F	0.17%	4.16%	0.08%	0.01%	64.26%	0.13%	0.21%	0.82%	0.01%	21.01%	0.07%	0.06%	0.80%	0.02%	0.30%	4.45%	0.07%	2.14%	0.18%	1.05%
30:T	8.31%	0.17%	0.25%	0.03%	0.33%	0.34%	0.14%	5.00%	0.24%	0.51%	0.27%	1.65%	5.82%	0.02%	1.24%	7.38%	67.30%	0.91%	0.01%	0.08%
31:S	1.06%	2.41%	1.38%	0.18%	0.35%	4.71%	1.16%	3.72%	2.52%	0.51%	0.44%	12.62%	0.77%	0.17%	21.65%	35.20%	9.51%	0.60%	0.27%	0.75%
32:Y	0.33%	12.13%	4.43%	0.23%	8.26%	0.56%	10.76%	0.35%	0.64%	2.83%	0.03%	5.27%	0.98%	0.50%	1.28%	9.56%	0.52%	0.27%	0.56%	40.50%
33:Y	0.43%	12.39%	3.05%	0.37%	13.77%	0.46%	7.47%	0.40%	0.28%	3.10%	0.02%	3.23%	1.32%	0.54%	0.99%	16.32%	0.63%	0.27%	0.58%	34.35%
34:M	1.56%	0.13%	0.09%	0.70%	3.65%	0.78%	0.06%	17.02%	1.63%	27.53%	18.36%	0.23%	2.03%	0.38%	2.80%	1.91%	6.31%	14.33%	0.48%	0.03%
35:H	0.69%	0.65%	3.02%	0.29%	0.83%	0.31%	47.36%	0.59%	1.92%	6.52%	0.09%	7.04%	8.95%	7.54%	7.58%	1.98%	1.22%	0.65%	0.10%	2.67%
36:W	0.04%	4.73%	0.02%	0.08%	0.16%	4.68%	0.03%	0.01%	0.02%	1.00%	0.02%	0.01%	0.08%	0.04%	6.61%	1.38%	0.02%	0.04%	80.73%	0.28%
37:V	5.20%	0.01%	0.27%	3.80%	0.18%	4.04%	0.02%	1.62%	0.75%	8.98%	6.02%	0.06%	0.73%	0.39%	0.61%	0.44%	1.13%	65.69%	0.05%	0.00%
38:R	0.05%	0.57%	0.01%	0.09%	0.01%	1.42%	0.44%	0.02%	0.26%	0.60%	0.01%	0.04%	1.95%	1.26%	91.25%	0.34%	0.08%	0.03%	1.55%	0.01%
39:Q	0.08%	0.00%	0.03%	1.31%	0.00%	0.12%	1.07%	0.00%	1.03%	1.77%	0.03%	0.05%	2.92%	85.34%	5.94%	0.09%	0.07%	0.04%	0.08%	0.01%
40:A	89.05%	0.03%	0.62%	0.23%	0.02%	1.97%	0.01%	0.10%	0.02%	0.03%	0.01%	0.07%	1.23%	0.00%	0.03%	1.13%	3.48%	1.96%	0.00%	0.01%
41:P	0.83%	0.07%	0.04%	0.01%	0.06%	0.07%	0.92%	0.07%	0.00%	2.53%	0.00%	0.03%	89.19%	0.24%	1.82%	2.52%	1.46%	0.10%	0.00%	0.03%
42:G	1.06%	0.07%	0.35%	2.66%	0.01%	86.43%	0.02%	0.07%	0.15%	0.07%	0.01%	0.02%	0.10%	0.08%	7.91%	0.39%	0.17%	0.41%	0.03%	0.01%
43:Q	0.12%	0.07%	0.49%	1.36%	0.06%	0.16%	24.85%	0.16%	0.93%	4.40%	0.01%	1.21%	4.45%	52.75%	7.78%	0.37%	0.21%	0.19%	0.01%	0.41%
44:G	0.85%	0.19%	0.75%	2.66%	0.00%	90.06%	0.02%	0.03%	0.08%	0.07%	0.03%	0.02%	0.04%	0.05%	3.29%	0.53%	0.09%	0.79%	0.45%	0.01%
45:L	0.18%	0.08%	0.05%	0.01%	2.41%	0.06%	1.18%	1.62%	0.01%	76.12%	0.04%	0.06%	13.05%	0.19%	1.57%	0.40%	0.26%	2.69%	0.00%	0.03%
46:E	4.37%	0.02%	16.64%	56.96%	0.03%	7.84%	0.48%	0.08%	4.26%	0.40%	0.29%	0.50%	0.39%	3.78%	0.65%	0.23%	0.70%	2.21%	0.06%	0.12%
47:W	0.23%	7.86%	0.11%	0.42%	0.39%	4.49%	0.10%	0.05%	0.39%	2.12%	0.16%	0.07%	0.23%	0.13%	9.74%	3.81%	0.23%	0.27%	68.55%	0.64%
48:M	1.66%	0.00%	0.02%	0.99%	0.08%	0.72%	0.01%	2.64%	5.07%	12.79%	45.65%	0.08%	0.70%	0.42%	5.39%	0.42%	7.84%	15.41%	0.11%	0.00%
49:G	3.72%	0.05%	2.31%	9.17%	0.03%	66.19%	0.07%	0.53%	0.85%	0.35%	0.06%	0.23%	0.27%	0.22%	10.57%	0.46%	0.72%	4.16%	0.04%	0.02%
50:I	0.98%	0.04%	0.20%	1.17%	1.43%	1.03%	0.16%	33.69%	3.61%	21.89%	6.53%	1.04%	1.54%	0.82%	5.83%	1.89%	7.07%	11.02%	0.03%	0.03%
51:I	1.28%	0.31%	0.53%	0.07%	6.74%	0.86%	0.25%	45.43%	0.39%	11.97%	2.43%	1.66%	0.72%	0.04%	1.62%	2.76%	4.57%	18.17%	0.04%	0.15%
52:N	0.50%	0.57%	5.51%	1.06%	0.29%	0.88%	5.16%	2.98%	14.41%	0.49%	0.44%	48.01%	0.51%	0.76%	3.56%	6.46%	5.91%	0.38%	0.04%	2.08%
53:P	3.20%	0.33%	0.10%	0.03%	0.43%	0.17%	1.15%	0.30%	0.01%	3.18%	0.02%	0.11%	78.53%	0.16%	2.18%	5.95%	3.62%	0.42%	0.01%	0.11%
54:S	1.00%	7.22%	1.32%	0.17%	0.88%	10.17%	0.84%	3.96%	0.64%	0.84%	0.13%	4.83%	0.80%	0.10%	13.20%	47.49%	4.71%	0.76%	0.35%	0.59%
55:G	6.65%	2.74%	9.14%	1.07%	0.29%	64.33%	0.79%	0.45%	0.08%	0.36%	0.01%	0.95%	0.45%	0.08%	3.33%	5.69%	0.75%	2.27%	0.13%	0.43%
56:G	13.49%	1.57%	16.87%	3.00%	0.58%	44.01%	1.69%	0.86%	0.25%	0.85%	0.05%	2.02%	0.91%	0.18%	2.79%	3.55%	1.76%	4.56%	0.17%	0.84%
57:S	1.31%	2.27%	2.46%	0.57%	1.08%	10.43%	1.02%	5.93%	1.88%	1.21%	0.34%	9.29%	0.54%	0.15%	33.52%	19.07%	5.85%	1.77%	0.46%	0.87%
58:T	6.01%	0.03%	0.10%	1.25%	0.07%	0.79%	0.03%	4.67%	2.25%	1.07%	0.62%	0.37%	4.64%	0.16%	6.84%	5.10%	65.22%	0.77%	0.01%	0.01%
59:S	0.14%	2.75%	2.98%	0.41%	0.44%	7.33%	2.43%	3.91%	2.22%	0.84%	0.47%	11.27%	0.93%	0.33%	20.47%	32.83%	6.38%	0.94%	0.66%	1.28%
60:Y	1.29%	12.98%	4.42%	0.22%	7.60%	0.63%	10.77%	0.37%	0.43%	2.39%	0.02%	5.35%	0.87%	0.57%	1.39%	9.11%	0.53%	0.25%	0.23%	41.58%
61:A	39.29%	0.02%	0.90%	9.55%	0.05%	2.78%	0.09%	1.09%	0.82%	0.80%	0.12%	0.10%	9.87%	0.46%	1.08%	6.98%	24.20%	1.80%	0.01%	0.01%
62:Q	0.27%	0.02%	0.48%	7.10%	0.02%	0.51%	3.43%	0.02%	2.43%	3.98%	0.18%	0.12%	3.28%	70.06%	7.19%	0.15%	0.14%	0.36%	0.17%	0.09%
63:K	0.76%	0.03%	0.81%	5.24%	0.03%	0.90%	0.45%	2.08%	53.59%	0.50%	4.03%	10.35%	0.35%	2.40%	8.11%	1.70%	7.93%	0.49%	0.15%	0.10%
64:F																				