

	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%	0.58%	5.75%	0.03%	0.63%	4.87%	0.11%	5.72%	6.67%	0.51%	0.55%	6.31%	58.52%	6.90%	0.40%	0.63%	0.63%	0.29%	0.25%
2:V	5.66%	0.03%	0.29%	4.22%	0.48%	3.90%	0.02%	3.49%	0.76%	9.24%	6.76%	0.07%	0.38%	0.19%	0.71%	0.38%	1.19%	62.18%	0.07%	0.01%
3:Q	0.15%	0.10%	0.43%	1.72%	0.07%	0.23%	12.41%	0.18%	6.48%	3.86%	0.16%	1.46%	3.09%	61.79%	6.08%	0.38%	0.50%	0.19%	0.46%	0.25%
4:L	1.21%	0.03%	0.05%	0.68%	0.95%	0.62%	0.07%	1.16%	0.66%	64.26%	6.52%	0.04%	2.87%	0.97%	1.88%	1.68%	0.88%	15.04%	0.42%	0.01%
5:V	5.40%	0.03%	0.30%	4.18%	0.39%	3.94%	0.02%	3.17%	0.76%	9.50%	6.57%	0.07%	0.52%	0.25%	0.68%	0.36%	1.32%	62.48%	0.06%	0.00%
6:Q	0.34%	0.06%	0.21%	1.17%	0.06%	0.36%	7.55%	0.07%	4.27%	10.59%	0.39%	0.76%	6.82%	56.34%	7.81%	0.71%	0.56%	0.57%	1.20%	0.15%
7:S	2.26%	2.71%	0.05%	0.01%	2.64%	0.09%	0.08%	0.10%	0.01%	0.47%	0.00%	0.05%	5.32%	0.00%	0.15%	82.88%	2.17%	0.12%	0.11%	0.76%
8:G	0.79%	0.01%	0.13%	3.53%	0.00%	89.82%	0.00%	0.00%	0.13%	0.09%	0.05%	0.01%	0.04%	0.10%	3.30%	0.06%	0.08%	0.87%	0.99%	0.00%
9:A	58.63%	0.09%	0.55%	0.06%	0.11%	1.45%	0.10%	0.60%	0.01%	0.33%	0.01%	0.19%	10.45%	0.01%	0.17%	4.71%	20.97%	1.52%	0.00%	0.03%
10:E	3.81%	0.02%	8.30%	66.91%	0.02%	7.36%	0.47%	0.07%	3.76%	0.33%	0.19%	0.51%	0.41%	4.31%	0.63%	0.19%	0.60%	1.91%	0.05%	0.14%
11:V	6.56%	0.01%	0.36%	5.32%	0.15%	5.44%	0.01%	1.54%	0.47%	9.40%	8.64%	0.03%	0.27%	0.11%	0.56%	0.38%	0.89%	59.70%	0.16%	0.00%
12:K	0.53%	0.01%	0.43%	5.64%	0.01%	0.97%	0.19%	0.92%	55.17%	0.50%	6.43%	2.56%	0.25%	4.11%	14.40%	0.59%	6.52%	0.50%	0.23%	0.02%
13:K	0.49%	0.01%	0.30%	6.02%	0.01%	1.28%	0.08%	0.53%	59.36%	0.45%	5.81%	1.32%	0.21%	3.28%	14.07%	0.42%	5.58%	0.51%	0.27%	0.01%
14:P	4.73%	0.41%	0.06%	0.02%	0.41%	0.13%	0.54%	0.20%	0.04%	1.61%	0.02%	0.16%	71.15%	0.08%	1.22%	12.60%	6.23%	0.29%	0.04%	0.08%
15:G	0.55%	0.01%	0.09%	2.55%	0.00%	91.38%	0.00%	0.00%	0.10%	0.06%	0.04%	0.00%	0.03%	0.08%	3.34%	0.05%	0.06%	0.65%	0.98%	0.00%
16:A	90.06%	0.01%	1.29%	0.06%	0.01%	1.11%	0.02%	0.09%	0.01%	0.03%	0.01%	0.07%	1.60%	0.00%	0.01%	0.95%	3.01%	1.65%	0.00%	0.01%
17:S	1.74%	0.20%	0.02%	0.12%	0.29%	0.05%	0.01%	0.06%	0.02%	2.61%	0.00%	0.01%	6.90%	0.05%	0.12%	86.19%	1.35%	0.07%	0.11%	0.08%
18:V	3.47%	0.00%	0.24%	3.55%	0.13%	3.30%	0.01%	1.19%	0.25%	11.19%	6.20%	0.02%	0.34%	0.18%	0.36%	0.18%	0.50%	68.85%	0.06%	0.00%
19:K	0.35%	0.02%	0.65%	6.27%	0.01%	0.56%	0.39%	0.68%	66.29%	0.23%	1.93%	5.93%	0.18%	4.43%	6.63%	1.02%	4.09%	0.18%	0.09%	0.06%
20:V	10.13%	0.23%	5.27%	0.35%	4.15%	5.55%	0.28%	13.00%	0.10%	7.63%	0.50%	0.92%	2.05%	0.02%	0.27%	1.92%	4.99%	42.57%	0.01%	0.10%
21:S	3.60%	8.67%	0.66%	0.02%	10.15%	0.37%	0.87%	0.16%	0.04%	2.65%	0.02%	0.34%	3.38%	0.04%	0.42%	60.77%	0.89%	0.64%	0.56%	5.76%
22:C	0.30%	59.43%	0.81%	0.04%	3.33%	2.95%	1.71%	0.09%	0.07%	1.29%	0.01%	0.74%	0.64%	0.07%	3.23%	9.02%	0.19%	0.14%	4.98%	10.97%
23:K	1.84%	0.01%	0.16%	6.88%	0.01%	1.09%	0.07%	0.24%	40.62%	0.75%	5.76%	0.79%	1.46%	3.82%	15.57%	1.07%	18.84%	0.65%	0.34%	0.02%
24:A	71.59%	0.01%	0.41%	3.19%	0.03%	1.26%	0.01%	0.23%	0.31%	0.26%	0.04%	0.05%	3.84%	0.06%	0.22%	8.78%	8.93%	0.78%	0.00%	0.01%
25:S	1.71%	12.29%	0.29%	0.04%	10.90%	0.70%	0.51%	0.54%	0.02%	2.25%	0.02%	0.24%	5.54%	0.05%	1.25%	58.08%	1.86%	0.71%	0.37%	2.63%
26:G	5.33%	0.05%	2.81%	11.32%	0.03%	68.45%	0.11%	0.33%	0.66%	0.41%	0.03%	0.16%	0.48%	0.34%	5.99%	0.43%	0.94%	2.05%	0.04%	0.03%
27:Y	0.50%	9.53%	9.85%	0.75%	7.34%	1.27%	13.24%	0.77%	1.03%	2.07%	0.04%	9.69%	0.85%	0.68%	1.74%	8.36%	0.72%	0.48%	0.25%	30.85%
28:T	10.35%	0.25%	0.32%	0.03%	0.42%	0.42%	0.15%	5.28%	0.32%	0.44%	0.56%	1.70%	7.39%	0.01%	0.72%	9.64%	60.77%	1.03%	0.02%	0.16%
29:F	0.18%	3.05%	0.07%	0.02%	43.53%	0.13%	0.19%	0.91%	0.02%	40.86%	0.22%	0.05%	1.04%	0.08%	0.33%	5.85%	0.12%	2.04%	0.49%	0.82%
30:N	0.96%	0.65%	6.97%	0.83%	0.37%	1.36%	5.02%	4.33%	8.77%	0.58%	0.36%	41.01%	0.69%	0.75%	6.56%	8.25%	9.76%	0.63%	0.04%	2.10%
31:S	1.20%	3.08%	1.74%	0.21%	0.36%	5.85%	0.99%	3.96%	2.49%	0.39%	0.44%	12.50%	0.68%	0.11%	19.98%	35.38%	8.96%	0.57%	0.30%	0.80%
32:Y	0.31%	12.16%	4.35%	0.22%	8.14%	0.54%	10.64%	0.34%	0.63%	2.71%	0.03%	5.23%	0.92%	0.48%	1.21%	9.27%	0.49%	0.25%	0.54%	41.56%
33:Y	0.40%	12.31%	3.00%	0.36%	13.67%	0.43%	7.38%	0.39%	0.27%	2.99%	0.02%	3.20%	1.25%	0.52%	0.93%	16.07%	0.59%	0.26%	0.58%	35.39%
34:M	1.50%	0.11%	0.09%	0.67%	3.53%	0.76%	0.06%	17.21%	1.62%	27.34%	19.00%	0.22%	1.92%	0.36%	2.77%	1.82%	6.28%	14.28%	0.45%	0.02%
35:H	0.65%	0.61%	2.96%	0.28%	0.80%	0.29%	48.21%	0.58%	1.83%	6.49%	0.09%	7.05%	8.80%	7.47%	7.44%	1.95%	1.15%	0.63%	0.10%	2.63%
36:W	0.04%	4.66%	0.02%	0.07%	0.15%	4.54%	0.03%	0.01%	0.02%	1.00%	0.01%	0.01%	0.08%	0.04%	6.41%	1.33%	0.02%	0.03%	81.26%	0.26%
37:V	5.15%	0.01%	0.26%	3.72%	0.16%	3.93%	0.02%	1.55%	0.72%	8.87%	5.99%	0.06%	0.71%	0.36%	0.57%	0.41%	1.09%	66.38%	0.05%	0.00%
38:R	0.05%	0.54%	0.01%	0.09%	0.01%	1.36%	0.43%	0.02%	0.27%	0.58%	0.00%	0.05%	1.91%	1.20%	91.54%	0.33%	0.07%	0.02%	1.49%	0.02%
39:Q	0.07%	0.00%	0.02%	1.29%	0.00%	0.12%	1.01%	0.00%	1.02%	1.73%	0.03%	0.05%	2.82%	85.82%	5.73%	0.09%	0.06%	0.04%	0.07%	0.01%
40:A	89.25%	0.03%	0.61%	0.23%	0.02%	1.94%	0.01%	0.09%	0.02%	0.02%	0.00%	0.06%	1.21%	0.00%	0.03%	1.09%	3.41%	1.94%	0.00%	0.01%
41:P	0.81%	0.07%	0.03%	0.01%	0.06%	0.07%	0.90%	0.07%	0.00%	2.46%	0.00%	0.03%	89.50%	0.22%	1.76%	2.44%	1.43%	0.09%	0.00%	0.03%
42:G	1.04%	0.06%	0.34%	2.62%	0.00%	86.79%	0.02%	0.07%	0.15%	0.07%	0.01%	0.02%	0.09%	0.07%	7.72%	0.36%	0.16%	0.41%	0.03%	0.00%
43:Q	0.11%	0.07%	0.47%	1.35%	0.06%	0.15%	24.64%	0.14%	0.90%	4.28%	0.01%	1.18%	4.35%	53.51%	7.64%	0.35%	0.21%	0.18%	0.01%	0.39%
44:G	0.82%	0.19%	0.71%	2.61%	0.01%	90.38%	0.02%	0.03%	0.07%	0.06%	0.03%	0.03%	0.04%	0.05%	3.17%	0.51%	0.08%	0.76%	0.44%	0.01%
45:L	0.17%	0.08%	0.04%	0.01%	2.35%	0.05%	1.13%	1.58%	0.01%	76.75%	0.04%	0.05%	12.73%	0.17%	1.55%	0.37%	0.25%	2.62%	0.00%	0.03%
46:E	4.29%	0.02%	16.44%	57.67%	0.03%	7.63%	0.46%	0.08%	4.26%	0.40%	0.27%	0.47%	0.36%	3.75%	0.63%	0.22%	0.68%	2.17%	0.05%	0.11%
47:W	0.20%	7.70%	0.10%	0.41%	0.39%	4.35%	0.09%	0.04%	0.40%	2.10%	0.14%	0.07%	0.23%	0.13%	9.61%	3.70%	0.22%	0.25%	69.27%	0.62%
48:M	1.56%	0.00%	0.02%	0.95%	0.07%	0.70%	0.01%	2.62%	4.99%	12.55%	46.72%	0.07%	0.65%	0.40%	5.25%	0.37%	7.71%	15.26%	0.10%	0.00%
49:G	3.59%	0.04%	2.25%	9.04%	0.03%	66.95%	0.06%	0.51%	0.83%	0.34%	0.05%	0.21%	0.26%	0.21%	10.37%	0.44%	0.70%	4.08%	0.04%	0.02%
50:I	0.94%	0.04%	0.19%	1.11%	1.36%	0.99%	0.16%	34.50%	3.61%	21.79%	6.54%	1.01%	1.44%	0.77%	5.78%	1.80%	6.99%	10.95%	0.02%	0.03%
51:I	1.22%	0.29%	0.48%	0.06%	6.69%	0.83%	0.24%	46.30%	0.39%	11.90%	2.41%	1.65%	0.69%	0.04%	1.56%	2.68%	4.51%	17.89%	0.04%	0.14%
52:N	0.48%	0.55%	5.43%	1.04%	0.28%	0.83%	5.10%	2.90%	14.46%	0.47%	0.42%	48.82%	0.47%	0.74%	3.39%	6.40%	5.78%	0.37%	0.04%	2.04%
53:P	3.15%	0.32%	0.10%	0.03%	0.41%	0.17%	1.10%	0.29%	0.01%	3.12%	0.02%	0.10%	79.04%	0.15%	2.14%	5.82%	3.49%	0.41%	0.01%	0.10%
54:S	0.97%	7.21%	1.29%	0.15%	0.85%	10.04%	0.81%	3.90%	0.62%	0.79%	0.13%	4.82%	0.76%	0.09%	13.03%	48.32%	4.62%	0.72%	0.34%	0.55%
55:G	6.50%	2.70%	9.07%	1.05%	0.28%	64.91%	0.76%	0.45%	0.09%	0.35%	0.01%	0.94%	0.42%	0.07%	3.25%	5.64%	0.73%	2.24%	0.12%	0.42%
56:G	13.45%	1.53%	16.92%	2.93%	0.56%	44.66%	1.63%	0.84%	0.22%	0.81%	0.05%	1.98%	0.85%	0.17%	2.70%	3.53%	1.70%	4.50%	0.15%	0.82%
57:S	1.22%	2.29%	2.40%	0.54%	1.03%	10.34%	1.00%	5.91%	1.82%	1.15%	0.33%	9.34%	0.52%	0.14%	33.41%	19.64%	5.85%	1.74%	0.45%	0.87%
58:T	5.95%	0.02%	0.09%	1.21%	0.06%	0.76%	0.03%	4.57%	2.16%	1.03%	0.59%	0.35%	4.52%	0.15%	6.69%	4.96%	66.11%	0.72%	0.01%	0.01%
59:S	1.08%	2.77%	2.89%	0.38%	0.44%	7.23%	2.30%	3.86%	2.16%	0.80%	0.45%	11.32%	0.89%	0.32%	20.46%	33.56%	6.30%	0.89%	0.65%	1.24%
60:Y	0.28%	12.88%	4.30%	0.21%	7.48%	0.60%	10.74%	0.36%	0.40%	2.27%	0.01%	5.37%	0.85%	0.53%	1.34%	8.95%	0.51%	0.24%	0.21%	42.47%
61:A	40.04%	0.02%	0.86%	9.55%	0.05%	2.70%	0.08%	1.05%	0.78%	0.79%	0.12%	0.09%	9.71%	0.45%	1.02%	6.85%	24.06%	1.77%	0.01%	0.01%
62:Q	0.26%	0.02%	0.45%	6.95%	0.01%	0.46%	3.33%	0.02%	2.39%	3.88%	0.18%	0.12%	3.21%	70.77%	7.08%	0.14%	0.13%	0.34%	0.16%	0.09%
63:K	0.70%	0.03%	0.75%	5.15%	0.03%	0.86%	0.42%	2.02%	54.46%	0.48%	4.01%	10.26%	0.34%	2.40%	7.95%	1.64%	7.79%	0.48%	0.14%	0.09%
64:F																				