

	A	C	D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	V	W	Y
1:Q	0.69%	0.04%	0.64%	5.94%	0.03%	0.69%	5.02%	0.13%	5.93%	6.91%	0.59%	0.60%	6.57%	56.54%	7.23%	0.45%	0.71%	0.69%	0.34%	0.28%
2:V	5.89%	0.04%	0.32%	4.44%	0.54%	4.06%	0.02%	3.73%	0.83%	9.60%	6.83%	0.08%	0.43%	0.19%	0.80%	0.45%	1.35%	60.30%	0.08%	0.00%
3:Q	0.18%	0.12%	0.48%	1.86%	0.09%	0.27%	12.67%	0.20%	6.77%	4.14%	0.18%	1.61%	3.30%	59.70%	6.46%	0.43%	0.54%	0.22%	0.49%	0.27%
4:L	1.34%	0.04%	0.05%	0.77%	1.05%	0.67%	0.07%	1.28%	0.73%	62.80%	6.59%	0.05%	2.97%	1.02%	2.06%	1.84%	0.97%	15.22%	0.46%	0.01%
5:V	5.68%	0.03%	0.34%	4.37%	0.44%	4.11%	0.03%	3.38%	0.82%	9.93%	6.67%	0.07%	0.58%	0.28%	0.80%	0.41%	1.46%	60.52%	0.07%	0.00%
6:Q	0.39%	0.07%	0.24%	1.27%	0.08%	0.42%	7.73%	0.09%	4.46%	10.98%	0.44%	0.82%	7.12%	54.27%	8.12%	0.79%	0.63%	0.61%	1.30%	0.17%
7:S	2.39%	2.86%	0.06%	0.00%	2.85%	0.10%	0.08%	0.11%	0.00%	0.54%	0.01%	0.06%	5.62%	0.01%	0.16%	81.71%	2.37%	0.14%	0.12%	0.81%
8:G	0.86%	0.02%	0.14%	3.77%	0.00%	89.08%	0.01%	0.01%	0.14%	0.10%	0.06%	0.01%	0.04%	0.11%	3.51%	0.07%	0.10%	0.93%	1.06%	0.00%
9:A	56.73%	0.10%	0.58%	0.06%	0.12%	1.52%	0.12%	0.65%	0.01%	0.38%	0.01%	0.21%	11.01%	0.01%	0.20%	4.96%	21.67%	1.61%	0.00%	0.04%
10:E	3.94%	0.02%	8.69%	65.11%	0.02%	7.74%	0.52%	0.08%	3.90%	0.37%	0.21%	0.55%	0.45%	4.54%	0.71%	0.21%	0.68%	2.03%	0.06%	0.15%
11:V	6.80%	0.01%	0.40%	5.61%	0.16%	5.63%	0.01%	1.68%	0.53%	9.78%	8.83%	0.04%	0.30%	0.14%	0.63%	0.41%	0.99%	57.87%	0.18%	0.00%
12:K	0.61%	0.01%	0.48%	5.83%	0.01%	1.09%	0.22%	1.02%	53.14%	0.57%	6.62%	2.64%	0.31%	4.30%	14.78%	0.66%	6.86%	0.56%	0.26%	0.03%
13:K	0.56%	0.01%	0.33%	6.26%	0.01%	1.43%	0.10%	0.56%	57.33%	0.52%	5.94%	1.39%	0.24%	3.43%	14.67%	0.45%	5.88%	0.57%	0.30%	0.01%
14:P	4.95%	0.44%	0.06%	0.02%	0.45%	0.14%	0.55%	0.22%	0.04%	1.66%	0.02%	0.18%	69.52%	0.10%	1.30%	13.25%	6.65%	0.31%	0.05%	0.10%
15:G	0.59%	0.02%	0.11%	2.70%	0.00%	90.78%	0.00%	0.00%	0.11%	0.08%	0.05%	0.01%	0.04%	0.08%	3.55%	0.06%	0.07%	0.71%	1.03%	0.00%
16:A	89.38%	0.01%	1.37%	0.07%	0.02%	1.16%	0.02%	0.09%	0.01%	0.03%	0.01%	0.08%	1.74%	0.00%	0.02%	1.06%	3.18%	1.74%	0.00%	0.01%
17:S	1.83%	0.24%	0.02%	0.13%	0.32%	0.06%	0.02%	0.07%	0.02%	2.73%	0.01%	0.01%	7.35%	0.05%	0.14%	85.26%	1.45%	0.08%	0.14%	0.09%
18:V	3.64%	0.01%	0.26%	3.70%	0.15%	3.47%	0.01%	1.28%	0.27%	11.86%	6.35%	0.02%	0.40%	0.20%	0.42%	0.21%	0.56%	67.11%	0.07%	0.00%
19:K	0.36%	0.02%	0.68%	6.76%	0.01%	0.56%	0.41%	0.55%	67.75%	0.19%	1.07%	6.15%	0.19%	4.79%	5.30%	1.08%	3.82%	0.16%	0.09%	0.06%
20:V	10.19%	0.04%	4.10%	0.26%	0.41%	4.91%	0.04%	1.42%	0.04%	1.23%	0.21%	0.12%	0.14%	0.01%	0.06%	0.19%	0.36%	76.24%	0.00%	0.02%
21:S	3.63%	2.26%	0.13%	0.01%	2.41%	0.14%	0.31%	0.10%	0.01%	1.10%	0.01%	0.13%	9.82%	0.02%	0.26%	76.12%	1.61%	0.27%	0.14%	1.52%
22:C	0.33%	58.46%	0.91%	0.05%	3.49%	3.03%	1.75%	0.09%	0.09%	1.41%	0.01%	0.78%	0.69%	0.08%	2.83%	9.36%	0.19%	0.16%	5.18%	11.13%
23:K	1.85%	0.01%	0.22%	7.24%	0.01%	1.22%	0.11%	0.26%	43.99%	0.77%	5.00%	1.01%	1.44%	4.14%	14.37%	1.11%	16.19%	0.68%	0.35%	0.03%
24:A	46.85%	0.15%	1.23%	0.09%	0.15%	1.69%	0.15%	0.82%	0.04%	0.34%	0.03%	0.45%	11.78%	0.01%	0.17%	7.27%	27.14%	1.57%	0.00%	0.07%
25:S	2.81%	12.44%	0.26%	0.02%	10.25%	0.33%	0.41%	0.26%	0.02%	2.15%	0.01%	0.22%	4.37%	0.03%	0.37%	61.26%	1.10%	0.51%	0.51%	2.65%
26:G	5.51%	0.06%	3.06%	11.56%	0.04%	67.07%	0.13%	0.35%	0.72%	0.46%	0.03%	0.19%	0.53%	0.38%	6.19%	0.49%	1.01%	2.13%	0.04%	0.04%
27:Y	0.55%	9.54%	10.10%	0.83%	7.48%	1.40%	13.46%	0.84%	1.08%	2.30%	0.04%	9.65%	0.96%	0.75%	1.92%	8.75%	0.79%	0.53%	0.28%	28.76%
28:T	10.76%	0.27%	0.35%	0.04%	0.48%	0.47%	0.16%	5.45%	0.35%	0.52%	0.59%	1.76%	7.74%	0.01%	0.78%	10.07%	58.86%	1.13%	0.02%	0.17%
29:F	0.18%	4.22%	0.08%	0.01%	63.23%	0.15%	0.22%	0.84%	0.01%	21.61%	0.07%	0.07%	0.85%	0.03%	0.30%	4.61%	0.08%	2.20%	0.19%	1.07%
30:T	8.04%	0.22%	0.42%	0.02%	0.33%	0.55%	0.16%	4.44%	0.20%	0.50%	0.11%	1.65%	6.03%	0.01%	0.58%	8.34%	67.09%	1.20%	0.01%	0.11%
31:G	11.56%	0.47%	20.96%	1.44%	0.06%	55.57%	0.54%	0.17%	0.08%	0.24%	0.02%	0.48%	0.22%	0.06%	1.09%	1.11%	0.46%	5.29%	0.02%	0.16%
32:Y	0.29%	12.53%	3.22%	0.17%	8.54%	0.52%	10.47%	0.30%	0.58%	3.08%	0.03%	4.40%	1.00%	0.51%	1.27%	10.28%	0.53%	0.20%	0.61%	41.47%
33:Y	0.46%	12.51%	3.05%	0.38%	13.92%	0.47%	7.59%	0.43%	0.29%	3.26%	0.02%	3.25%	1.39%	0.57%	1.08%	16.65%	0.67%	0.29%	0.61%	33.11%
34:M	1.63%	0.14%	0.09%	0.75%	3.77%	0.85%	0.07%	16.78%	1.66%	27.70%	17.50%	0.24%	2.14%	0.41%	2.91%	2.01%	6.42%	14.40%	0.49%	0.03%
35:H	0.74%	0.68%	3.08%	0.31%	0.87%	0.34%	46.28%	0.62%	1.96%	6.63%	0.10%	7.09%	9.02%	7.69%	7.73%	2.06%	1.29%	0.68%	0.11%	2.72%
36:W	0.04%	4.91%	0.02%	0.08%	0.17%	4.86%	0.03%	0.01%	0.02%	1.05%	0.02%	0.02%	0.10%	0.05%	6.82%	1.43%	0.03%	0.04%	80.02%	0.28%
37:V	5.32%	0.01%	0.29%	3.85%	0.19%	4.11%	0.03%	1.68%	0.80%	9.35%	6.06%	0.06%	0.78%	0.41%	0.66%	0.48%	1.22%	64.63%	0.06%	0.00%
38:R	0.05%	0.60%	0.01%	0.10%	0.01%	1.49%	0.47%	0.02%	0.29%	0.65%	0.01%	0.05%	2.02%	1.27%	90.78%	0.39%	0.09%	0.03%	1.65%	0.01%
39:Q	0.09%	0.00%	0.04%	1.37%	0.00%	0.13%	1.09%	0.00%	1.08%	1.85%	0.03%	0.05%	3.01%	84.86%	6.07%	0.10%	0.07%	0.05%	0.08%	0.02%
40:A	88.62%	0.03%	0.64%	0.25%	0.03%	2.06%	0.01%	0.10%	0.02%	0.03%	0.01%	0.07%	1.26%	0.00%	0.03%	1.20%	3.57%	2.04%	0.00%	0.01%
41:P	0.87%	0.08%	0.04%	0.01%	0.07%	0.07%	0.95%	0.08%	0.00%	2.60%	0.00%	0.04%	88.82%	0.25%	1.85%	2.60%	1.52%	0.11%	0.00%	0.03%
42:G	1.09%	0.07%	0.37%	2.73%	0.00%	85.97%	0.02%	0.08%	0.16%	0.08%	0.01%	0.03%	0.10%	0.08%	8.15%	0.40%	0.19%	0.44%	0.03%	0.01%
43:Q	0.13%	0.07%	0.53%	1.41%	0.07%	0.18%	25.08%	0.17%	0.97%	4.50%	0.01%	1.31%	4.63%	51.63%	8.02%	0.39%	0.24%	0.20%	0.01%	0.43%
44:G	0.86%	0.20%	0.80%	2.72%	0.00%	89.68%	0.03%	0.03%	0.08%	0.08%	0.04%	0.03%	0.05%	0.06%	3.42%	0.55%	0.10%	0.83%	0.45%	0.01%
45:L	0.18%	0.10%	0.05%	0.01%	2.44%	0.06%	1.23%	1.66%	0.01%	75.33%	0.04%	0.06%	13.50%	0.21%	1.65%	0.42%	0.28%	2.73%	0.00%	0.03%
46:E	4.46%	0.02%	16.96%	55.88%	0.03%	7.97%	0.52%	0.10%	4.34%	0.43%	0.31%	0.54%	0.42%	3.86%	0.69%	0.25%	0.74%	2.31%	0.06%	0.13%
47:W	0.23%	7.99%	0.12%	0.44%	0.42%	4.63%	0.10%	0.05%	0.42%	2.18%	0.15%	0.08%	0.25%	0.14%	10.03%	3.91%	0.24%	0.28%	67.68%	0.65%
48:M	1.78%	0.00%	0.03%	1.04%	0.09%	0.79%	0.01%	3.69%	5.18%	12.97%	43.58%	0.09%	0.74%	0.44%	5.50%	0.48%	8.04%	15.44%	0.12%	0.00%
49:G	9.13%	0.08%	4.12%	17.85%	0.04%	50.27%	0.13%	0.76%	1.61%	0.69%	0.11%	0.36%	0.77%	0.48%	7.79%	1.02%	1.85%	2.84%	0.07%	0.04%
50:W	0.18%	6.28%	0.15%	0.39%	0.58%	6.65%	0.36%	0.06%	0.23%	3.72%	0.12%	0.15%	0.60%	0.47%	14.41%	4.39%	0.17%	0.30%	59.75%	1.04%
51:I	0.67%	0.08%	0.18%	0.05%	1.82%	0.27%	0.06%	67.93%	0.47%	5.70%	3.09%	1.15%	0.34%	0.02%	1.56%	2.59%	5.18%	8.79%	0.02%	0.02%
52:N	0.55%	0.61%	5.59%	1.12%	0.31%	0.95%	5.24%	3.02%	14.57%	0.52%	0.45%	46.71%	0.53%	0.80%	3.76%	6.59%	6.15%	0.40%	0.04%	2.08%
53:P	3.24%	0.36%	0.12%	0.04%	0.48%	0.19%	1.16%	0.34%	0.02%	3.48%	0.02%	0.12%	77.63%	0.19%	2.38%	6.01%	3.62%	0.48%	0.02%	0.12%
54:N	1.08%	0.72%	13.74%	1.77%	0.85%	1.65%	6.29%	4.38%	7.88%	0.99%	0.42%	40.25%	0.45%	1.07%	4.73%	6.03%	4.25%	0.94%	0.05%	2.47%
55:S	0.64%	5.66%	0.85%	0.10%	0.44%	7.20%	0.88%	3.02%	0.84%	0.35%	0.11%	6.00%	0.57%	0.10%	11.65%	52.75%	7.74%	0.39%	0.23%	0.49%
56:G	6.52%	2.82%	8.90%	1.07%	0.30%	64.10%	0.82%	0.48%	0.10%	0.38%	0.01%	0.98%	0.47%	0.08%	3.50%	5.87%	0.77%	2.25%	0.13%	0.45%
57:G	7.26%	0.78%	13.37%	2.57%	0.13%	64.52%	0.37%	0.22%	0.10%	0.23%	0.01%	0.34%	0.20%	0.06%	3.41%	0.94%	0.37%	4.75%	0.05%	0.32%
58:T	5.83%	0.02%	0.10%	1.07%	0.06%	0.67%	0.03%	4.21%	2.07%	0.83%	0.56%	0.36%	4.73%	0.14%	6.60%	5.08%	66.96%	0.66%	0.01%	0.01%
59:N	0.48%	1.07%	11.14%	1.92%	0.84%	0.89%	9.67%	3.72%	9.06%	0.91%	0.61%	36.76%	0.70%	1.40%	2.71%	5.94%	5.25%	0.67%	0.07%	6.06%
60:Y	0.50%	12.56%	3.27%	0.42%	13.53%	0.48%	7.29%	0.42%	0.33%	2.53%	0.02%	3.39%	1.24%	0.60%	1.07%	15.64%	0.67%	0.29%	0.41%	35.44%
61:A	39.09%	0.04%	1.00%	9.43%	0.11%	2.95%	0.10%	1.36%	0.84%	1.71%	0.16%	0.11%	11.52%	0.65%	1.31%	8.59%	19.04%	1.94%	0.03%	0.03%
62:Q	0.30%	0.02%	0.52%	7.23%	0.02%	0.53%	3.53%	0.03%	2.50%	4.10%	0.19%	0.13%	3.39%	69.19%	7.34%	0.17%	0.16%	0.39%	0.18%	0.09%
63:K	0.81%	0.03%	0.81%	5.43%	0.04%	0.97%	0.45%	2.10%	52.70%	0.55%	4.10%	10.17%	0.38%	2.43%	8.27%	1.71%	8.27%	0.53%	0.16%	0.10%
64:F																				