

	A	C	D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	V	W	Y
1:Q	0.49%	0.02%	0.46%	5.25%	0.02%	0.48%	4.43%	0.07%	5.30%	5.93%	0.40%	0.42%	5.69%	63.22%	6.17%	0.29%	0.47%	0.47%	0.22%	0.20%
2:V	5.02%	0.02%	0.20%	3.75%	0.35%	3.42%	0.01%	2.92%	0.59%	8.36%	6.54%	0.05%	0.29%	0.14%	0.53%	0.26%	0.90%	66.57%	0.05%	0.00%
3:Q	0.09%	0.07%	0.33%	1.44%	0.05%	0.16%	11.74%	0.12%	5.68%	3.29%	0.12%	1.15%	2.54%	66.79%	5.14%	0.25%	0.35%	0.13%	0.35%	0.19%
4:L	0.95%	0.02%	0.03%	0.55%	0.73%	0.46%	0.05%	0.92%	0.52%	67.97%	6.17%	0.03%	2.63%	0.91%	1.56%	1.28%	0.68%	14.22%	0.31%	0.01%
5:V	4.89%	0.02%	0.23%	3.69%	0.30%	3.43%	0.01%	2.65%	0.60%	8.48%	6.25%	0.05%	0.38%	0.20%	0.51%	0.23%	0.98%	67.07%	0.04%	0.00%
6:Q	0.26%	0.04%	0.15%	0.96%	0.03%	0.27%	7.14%	0.05%	3.78%	9.69%	0.29%	0.59%	6.07%	61.15%	7.11%	0.51%	0.40%	0.43%	0.95%	0.12%
7:S	1.99%	2.33%	0.03%	0.00%	2.34%	0.07%	0.06%	0.07%	0.00%	0.34%	0.00%	0.04%	4.59%	0.01%	0.11%	85.40%	1.80%	0.09%	0.08%	0.66%
8:G	0.66%	0.01%	0.08%	2.96%	0.00%	91.42%	0.00%	0.00%	0.10%	0.06%	0.04%	0.00%	0.02%	0.07%	2.90%	0.04%	0.07%	0.72%	0.86%	0.00%
9:A	63.39%	0.06%	0.48%	0.05%	0.08%	1.30%	0.08%	0.44%	0.01%	0.26%	0.01%	0.14%	9.29%	0.00%	0.12%	4.07%	18.78%	1.41%	0.00%	0.03%
10:E	3.43%	0.01%	7.49%	70.83%	0.01%	6.44%	0.36%	0.04%	3.48%	0.24%	0.16%	0.41%	0.31%	3.89%	0.47%	0.14%	0.46%	1.68%	0.03%	0.12%
11:V	5.87%	0.01%	0.28%	4.76%	0.10%	4.93%	0.01%	1.21%	0.36%	8.43%	8.10%	0.02%	0.19%	0.08%	0.42%	0.26%	0.66%	64.20%	0.12%	0.00%
12:K	0.41%	0.01%	0.33%	5.11%	0.01%	0.75%	0.14%	0.73%	59.85%	0.36%	6.01%	2.32%	0.18%	3.71%	13.30%	0.46%	5.75%	0.37%	0.18%	0.02%
13:K	0.35%	0.00%	0.23%	5.31%	0.01%	0.98%	0.06%	0.42%	63.98%	0.34%	5.50%	1.19%	0.16%	3.02%	12.65%	0.32%	4.90%	0.38%	0.21%	0.01%
14:P	4.18%	0.32%	0.05%	0.01%	0.32%	0.10%	0.49%	0.15%	0.02%	1.45%	0.01%	0.14%	74.81%	0.06%	1.14%	11.01%	5.41%	0.22%	0.03%	0.07%
15:G	1.83%	0.00%	0.37%	8.07%	0.00%	82.89%	0.01%	0.01%	0.26%	0.20%	0.13%	0.01%	0.09%	0.22%	2.71%	0.07%	0.18%	2.12%	0.79%	0.01%
16:S	2.49%	0.85%	0.08%	0.00%	1.41%	0.03%	0.12%	0.05%	0.01%	0.34%	0.00%	0.11%	5.62%	0.00%	0.04%	86.56%	1.23%	0.06%	0.08%	0.88%
17:S	1.63%	0.13%	0.00%	0.04%	0.13%	0.22%	0.00%	0.01%	0.01%	2.99%	0.03%	0.00%	4.74%	0.02%	0.11%	86.67%	0.84%	0.13%	2.27%	0.03%
18:V	5.73%	0.00%	0.26%	4.77%	0.07%	5.15%	0.01%	1.19%	0.44%	8.53%	8.23%	0.02%	0.28%	0.12%	0.44%	0.25%	0.84%	63.54%	0.10%	0.00%
19:K	0.23%	0.01%	0.48%	5.72%	0.01%	0.36%	0.28%	0.39%	73.54%	0.12%	0.91%	5.55%	0.12%	4.06%	4.25%	0.75%	3.01%	0.10%	0.05%	0.05%
20:V	8.52%	0.02%	3.41%	0.18%	0.29%	4.27%	0.02%	1.10%	0.02%	0.93%	0.15%	0.08%	0.09%	0.00%	0.04%	0.12%	0.23%	80.50%	0.00%	0.01%
21:S	3.04%	1.93%	0.09%	0.00%	2.06%	0.10%	0.20%	0.07%	0.01%	0.75%	0.01%	0.08%	8.29%	0.01%	0.18%	80.27%	1.33%	0.17%	0.09%	1.33%
22:C	0.21%	64.79%	0.62%	0.03%	2.95%	2.51%	1.25%	0.06%	0.05%	1.00%	0.00%	0.57%	0.46%	0.04%	2.28%	7.83%	0.13%	0.10%	4.75%	10.37%
23:K	1.36%	0.01%	0.14%	6.39%	0.00%	0.84%	0.07%	0.18%	50.51%	0.54%	4.80%	0.88%	1.03%	3.54%	12.95%	0.79%	15.23%	0.47%	0.24%	0.02%
24:A	52.47%	0.10%	1.01%	0.06%	0.10%	1.59%	0.11%	0.59%	0.02%	0.23%	0.01%	0.30%	10.78%	0.00%	0.11%	6.20%	24.86%	1.41%	0.00%	0.04%
25:S	2.56%	11.17%	0.18%	0.01%	9.21%	0.21%	0.27%	0.18%	0.01%	1.47%	0.01%	0.15%	3.61%	0.02%	0.24%	66.67%	0.91%	0.36%	0.36%	2.40%
26:G	2.08%	0.02%	0.28%	5.05%	0.00%	84.16%	0.02%	0.11%	0.24%	0.12%	0.01%	0.02%	0.12%	0.10%	6.33%	0.28%	0.29%	0.75%	0.02%	0.00%
27:G	2.01%	0.59%	4.21%	1.30%	0.05%	83.19%	0.15%	0.11%	0.10%	0.09%	0.00%	0.16%	0.12%	0.05%	4.65%	0.73%	0.17%	2.21%	0.02%	0.11%
28:T	7.64%	0.20%	0.30%	0.03%	0.38%	0.30%	0.15%	5.96%	0.36%	0.34%	0.57%	2.35%	3.48%	0.01%	0.71%	8.35%	67.90%	0.82%	0.01%	0.14%
29:F	0.12%	3.66%	0.05%	0.00%	65.61%	0.09%	0.14%	0.70%	0.01%	21.97%	0.07%	0.05%	0.60%	0.02%	0.21%	3.91%	0.05%	1.73%	0.13%	0.87%
30:S	0.69%	2.61%	1.10%	0.14%	0.22%	6.39%	1.09%	3.36%	1.94%	0.43%	0.24%	9.00%	0.56%	0.12%	39.30%	24.44%	7.11%	0.59%	0.18%	0.50%
31:S	0.84%	2.38%	1.67%	0.18%	0.29%	4.66%	0.97%	3.76%	2.15%	0.33%	0.40%	12.63%	0.43%	0.09%	19.23%	40.48%	8.19%	0.50%	0.25%	0.56%
32:Y	0.26%	11.12%	2.54%	0.23%	11.96%	0.33%	7.98%	0.42%	0.33%	1.97%	0.01%	3.78%	0.82%	0.55%	0.94%	13.69%	0.50%	0.26%	0.27%	42.03%
33:A	53.67%	0.56%	2.03%	0.87%	0.85%	3.75%	0.33%	2.11%	0.06%	1.34%	0.07%	0.66%	7.03%	0.03%	0.73%	6.67%	13.96%	5.05%	0.02%	0.20%
34:I	0.94%	0.39%	0.34%	0.04%	11.72%	0.42%	0.16%	46.09%	0.24%	15.02%	2.87%	1.36%	0.67%	0.03%	0.94%	1.85%	3.08%	13.67%	0.02%	0.14%
35:S	0.94%	2.76%	1.53%	0.13%	0.29%	5.78%	1.12%	3.31%	2.77%	0.45%	0.51%	12.04%	0.64%	0.15%	20.71%	36.48%	8.79%	0.57%	0.36%	0.66%
36:W	0.02%	4.06%	0.01%	0.03%	0.11%	2.26%	0.02%	0.00%	0.02%	0.88%	0.01%	0.01%	0.07%	0.04%	7.11%	1.12%	0.02%	0.02%	83.99%	0.20%
37:V	4.64%	0.00%	0.20%	3.35%	0.13%	3.39%	0.01%	1.26%	0.56%	7.82%	5.64%	0.03%	0.50%	0.27%	0.42%	0.29%	0.84%	70.59%	0.04%	0.00%
38:R	0.04%	0.40%	0.01%	0.07%	0.01%	1.07%	0.32%	0.01%	0.22%	0.49%	0.00%	0.03%	1.62%	1.09%	93.13%	0.24%	0.05%	0.02%	1.19%	0.01%
39:Q	0.06%	0.00%	0.02%	1.09%	0.00%	0.08%	0.90%	0.00%	0.89%	1.45%	0.02%	0.03%	2.41%	87.90%	4.94%	0.07%	0.04%	0.03%	0.05%	0.01%
40:A	90.93%	0.02%	0.49%	0.18%	0.02%	1.67%	0.01%	0.07%	0.01%	0.02%	0.00%	0.05%	1.06%	0.00%	0.02%	0.89%	2.92%	1.64%	0.00%	0.01%
41:P	0.73%	0.05%	0.03%	0.00%	0.05%	0.05%	0.77%	0.05%	0.00%	2.13%	0.00%	0.02%	90.95%	0.17%	1.56%	2.11%	1.25%	0.07%	0.00%	0.02%
42:G	0.30%	0.04%	0.24%	2.30%	0.00%	88.71%	0.01%	0.05%	0.12%	0.05%	0.00%	0.02%	0.06%	0.05%	6.67%	0.27%	0.12%	0.37%	0.02%	0.00%
43:Q	0.08%	0.05%	0.35%	1.21%	0.04%	0.11%	23.45%	0.11%	0.81%	3.76%	0.01%	0.98%	3.76%	57.78%	6.63%	0.26%	0.15%	0.14%	0.01%	0.32%
44:G	0.68%	0.14%	0.55%	2.29%	0.00%	92.00%	0.01%	0.02%	0.05%	0.05%	0.02%	0.01%	0.03%	0.04%	2.64%	0.38%	0.06%	0.64%	0.39%	0.00%
45:L	0.13%	0.06%	0.03%	0.01%	2.10%	0.04%	1.01%	1.33%	0.00%	79.97%	0.03%	0.03%	11.00%	0.13%	1.32%	0.27%	0.18%	2.34%	0.00%	0.02%
46:E	3.85%	0.01%	15.08%	62.26%	0.02%	6.72%	0.35%	0.05%	3.95%	0.28%	0.22%	0.38%	0.29%	3.39%	0.47%	0.16%	0.53%	1.86%	0.04%	0.09%
47:W	0.15%	7.07%	0.07%	0.33%	0.30%	3.84%	0.06%	0.03%	0.31%	1.84%	0.12%	0.04%	0.17%	0.10%	8.60%	3.24%	0.16%	0.19%	72.91%	0.48%
48:M	1.24%	0.00%	0.01%	0.73%	0.05%	0.53%	0.00%	2.20%	4.60%	11.19%	52.36%	0.05%	0.49%	0.30%	4.60%	0.28%	7.01%	14.28%	0.07%	0.00%
49:G	5.55%	0.02%	0.39%	8.84%	0.00%	71.25%	0.02%	0.25%	0.51%	0.22%	0.02%	0.04%	0.32%	0.14%	9.84%	0.64%	0.79%	1.12%	0.02%	0.00%
50:G	1.76%	0.12%	1.26%	7.24%	0.01%	81.11%	0.05%	0.07%	0.25%	0.27%	0.09%	0.08%	0.12%	0.19%	4.39%	0.33%	0.17%	2.19%	0.27%	0.02%
51:I	0.50%	0.09%	0.15%	0.03%	3.00%	0.25%	0.06%	70.54%	0.27%	4.93%	2.45%	1.13%	0.25%	0.01%	1.17%	2.26%	4.39%	8.50%	0.00%	0.02%
52:I	0.74%	0.18%	0.19%	0.03%	4.82%	0.38%	0.10%	58.86%	0.33%	9.10%	3.38%	1.10%	0.51%	0.01%	0.80%	1.92%	5.19%	12.27%	0.02%	0.05%
53:P	1.41%	0.14%	0.03%	0.01%	0.16%	0.06%	0.68%	0.12%	0.00%	1.73%	0.01%	0.04%	87.60%	0.07%	1.23%	4.34%	2.18%	0.15%	0.01%	0.04%
54:I	0.84%	0.33%	0.26%	0.06%	11.21%	0.39%	0.15%	43.19%	0.31%	15.79%	6.42%	0.98%	0.59%	0.03%	0.67%	1.82%	3.48%	13.37%	0.03%	0.11%
55:F	0.18%	2.79%	0.06%	0.01%	65.63%	0.08%	0.13%	1.17%	0.01%	16.34%	0.05%	0.07%	1.02%	0.02%	0.21%	9.44%	0.20%	1.63%	0.13%	0.83%
56:G	10.42%	0.85%	16.06%	4.29%	0.35%	54.37%	0.45%	0.58%	0.12%	0.53%	0.03%	0.68%	0.97%	0.09%	1.35%	2.63%	2.01%	3.91%	0.08%	0.25%
57:T	11.03%	0.04%	0.10%	1.03%	0.17%	0.54%	0.03%	8.14%	2.49%	2.54%	1.05%	0.40%	5.95%	0.20%	3.46%	7.10%	54.61%	1.04%	0.04%	0.02%
58:A	28.79%	0.01%	3.03%	29.53%	0.05%	6.73%	0.07%	1.83%	1.10%	1.71%	0.20%	0.14%	6.72%	0.60%	1.61%	3.85%	9.00%	4.99%	0.01%	0.02%
59:N	0.40%	0.81%	9.71%	1.38%	0.59%	0.61%	7.94%	3.27%	9.02%	0.56%	0.46%	45.97%	0.42%	0.96%	2.01%	5.36%	4.51%	0.47%	0.04%	5.51%
60:Y	0.18%	12.30%	3.30%	0.14%	7.12%	0.67%	7.93%	0.20%	0.25%	1.62%	0.01%	4.01%	0.49%	0.33%	0.86%	8.00%	0.36%	0.15%	0.15%	51.92%
61:A	45.08%	0.01%	0.66%	8.95%	0.03%	2.35%	0.06%	0.87%	0.63%	0.61%	0.08%	0.06%	8.93%	0.34%	0.76%	6.21%	22.75%	1.61%	0.01%	0.01%
62:Q	0.21%	0.01%	0.34%	6.26%	0.01%	0.35%	2.94%	0.02%	2.08%	3.43%	0.13%	0.08%	2.78%	74.52%	6.24%	0.10%	0.10%	0.25%	0.11%	0.06%
63:K	0.52%	0.02%	0.56%	4.70%	0.02%	0.66%	0.34%	1.62%	59.50%	0.37%	3.93%	9.53%	0.25%	2.25%	7.15%	1.29%	6.76%	0.37%	0.10%	0.07%
64:F	0.28%	3.61%</																		