

	A	C	D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	V	W	Y
1:Q	0.61%	0.03%	0.58%	5.67%	0.03%	0.60%	4.80%	0.10%	5.72%	6.55%	0.51%	0.54%	6.24%	59.07%	6.82%	0.39%	0.60%	0.62%	0.29%	0.25%
2:V	5.59%	0.03%	0.28%	4.20%	0.47%	3.83%	0.02%	3.42%	0.74%	9.11%	6.74%	0.07%	0.37%	0.19%	0.68%	0.37%	1.18%	62.64%	0.07%	0.00%
3:Q	0.15%	0.10%	0.44%	1.69%	0.07%	0.22%	12.34%	0.17%	6.42%	3.81%	0.16%	1.41%	2.99%	62.39%	5.97%	0.36%	0.46%	0.19%	0.44%	0.24%
4:L	1.18%	0.03%	0.04%	0.68%	0.92%	0.59%	0.06%	1.16%	0.64%	64.74%	6.48%	0.04%	2.84%	0.97%	1.85%	1.60%	0.85%	14.92%	0.39%	0.01%
5:V	5.38%	0.02%	0.29%	4.09%	0.38%	3.90%	0.02%	3.09%	0.74%	9.42%	6.54%	0.07%	0.49%	0.25%	0.67%	0.33%	1.27%	62.99%	0.05%	0.01%
6:Q	0.33%	0.06%	0.20%	1.14%	0.07%	0.34%	7.51%	0.07%	4.21%	10.58%	0.36%	0.73%	6.72%	56.91%	7.72%	0.68%	0.54%	0.53%	1.16%	0.15%
7:S	2.22%	2.71%	0.04%	0.00%	2.64%	0.09%	0.07%	0.10%	0.01%	0.46%	0.00%	0.05%	5.26%	0.01%	0.14%	83.08%	2.13%	0.12%	0.10%	0.77%
8:G	0.78%	0.01%	0.12%	3.44%	0.00%	90.00%	0.01%	0.00%	0.12%	0.08%	0.05%	0.00%	0.03%	0.09%	3.28%	0.06%	0.08%	0.86%	0.97%	0.00%
9:A	59.25%	0.08%	0.54%	0.06%	0.11%	1.42%	0.10%	0.58%	0.01%	0.34%	0.01%	0.18%	10.38%	0.01%	0.17%	4.60%	20.60%	1.54%	0.00%	0.03%
10:E	3.74%	0.02%	8.22%	67.30%	0.02%	7.30%	0.46%	0.07%	3.75%	0.31%	0.20%	0.50%	0.38%	4.27%	0.62%	0.18%	0.59%	1.89%	0.05%	0.13%
11:V	6.47%	0.01%	0.35%	5.31%	0.14%	5.37%	0.01%	1.49%	0.47%	9.33%	8.54%	0.03%	0.25%	0.11%	0.54%	0.35%	0.85%	60.23%	0.14%	0.00%
12:K	0.52%	0.01%	0.42%	5.56%	0.01%	0.96%	0.19%	0.90%	55.63%	0.48%	6.39%	2.53%	0.26%	4.08%	14.30%	0.58%	6.45%	0.48%	0.23%	0.03%
13:K	0.46%	0.01%	0.29%	5.91%	0.00%	1.24%	0.09%	0.52%	59.87%	0.44%	5.78%	1.31%	0.20%	3.30%	13.87%	0.41%	5.54%	0.48%	0.27%	0.01%
14:P	4.64%	0.40%	0.05%	0.01%	0.40%	0.12%	0.53%	0.19%	0.03%	1.60%	0.02%	0.17%	71.49%	0.08%	1.23%	12.45%	6.15%	0.28%	0.04%	0.08%
15:G	0.54%	0.02%	0.08%	2.53%	0.00%	91.54%	0.00%	0.00%	0.09%	0.06%	0.04%	0.00%	0.03%	0.07%	3.29%	0.05%	0.06%	0.63%	0.96%	0.00%
16:A	90.25%	0.01%	1.25%	0.06%	0.02%	1.08%	0.02%	0.08%	0.01%	0.02%	0.01%	0.07%	1.59%	0.00%	0.01%	0.96%	2.96%	1.59%	0.00%	0.01%
17:S	1.74%	0.21%	0.02%	0.13%	0.28%	0.05%	0.01%	0.06%	0.02%	2.58%	0.01%	0.00%	6.83%	0.04%	0.11%	86.35%	1.33%	0.06%	0.11%	0.08%
18:V	3.47%	0.00%	0.23%	3.52%	0.13%	3.24%	0.01%	1.15%	0.24%	11.04%	6.17%	0.01%	0.35%	0.18%	0.36%	0.18%	0.48%	69.18%	0.06%	0.00%
19:K	0.29%	0.02%	0.59%	6.35%	0.01%	0.47%	0.36%	0.48%	70.05%	0.16%	1.02%	5.96%	0.16%	4.49%	4.88%	0.95%	3.49%	0.13%	0.07%	0.06%
20:V	9.61%	0.03%	3.83%	0.23%	0.36%	4.70%	0.03%	1.31%	0.03%	1.10%	0.19%	0.11%	0.11%	0.00%	0.05%	0.17%	0.31%	77.81%	0.00%	0.02%
21:S	3.41%	2.15%	0.12%	0.00%	2.26%	0.12%	0.28%	0.09%	0.01%	0.94%	0.01%	0.11%	9.25%	0.01%	0.22%	77.71%	1.50%	0.22%	0.12%	1.46%
22:C	0.27%	60.85%	0.81%	0.04%	3.27%	2.85%	1.55%	0.08%	0.07%	1.23%	0.01%	0.70%	0.58%	0.07%	2.63%	8.77%	0.17%	0.13%	5.02%	10.90%
23:K	1.63%	0.01%	0.18%	6.87%	0.01%	1.06%	0.09%	0.22%	46.40%	0.68%	4.95%	0.97%	1.28%	3.94%	13.90%	0.97%	15.88%	0.61%	0.31%	0.02%
24:A	48.82%	0.13%	1.14%	0.09%	0.13%	1.65%	0.12%	0.73%	0.03%	0.31%	0.02%	0.40%	11.48%	0.01%	0.14%	6.90%	26.34%	1.50%	0.00%	0.05%
25:S	2.70%	11.98%	0.22%	0.02%	9.94%	0.28%	0.33%	0.23%	0.02%	1.84%	0.01%	0.19%	4.08%	0.03%	0.31%	63.27%	1.02%	0.46%	0.45%	2.63%
26:G	5.30%	0.04%	2.76%	11.25%	0.03%	68.89%	0.10%	0.32%	0.67%	0.39%	0.03%	0.16%	0.47%	0.33%	5.83%	0.41%	0.89%	2.04%	0.03%	0.04%
27:Y	0.48%	9.47%	9.78%	0.74%	7.27%	1.25%	13.18%	0.76%	1.01%	2.05%	0.04%	9.63%	0.84%	0.67%	1.71%	8.32%	0.70%	0.46%	0.26%	31.40%
28:T	10.29%	0.23%	0.31%	0.03%	0.41%	0.41%	0.14%	5.23%	0.31%	0.43%	0.55%	1.68%	7.35%	0.01%	0.73%	9.55%	61.18%	1.00%	0.02%	0.15%
29:F	0.15%	4.07%	0.06%	0.01%	65.56%	0.12%	0.19%	0.78%	0.01%	20.39%	0.06%	0.06%	0.74%	0.02%	0.27%	4.24%	0.07%	2.03%	0.16%	1.03%
30:T	7.59%	0.18%	0.37%	0.02%	0.29%	0.47%	0.14%	4.23%	0.18%	0.42%	0.10%	1.56%	5.60%	0.01%	0.50%	7.86%	69.33%	1.05%	0.01%	0.09%
31:G	11.01%	0.43%	20.08%	1.30%	0.06%	57.92%	0.48%	0.14%	0.06%	0.20%	0.02%	0.43%	0.19%	0.04%	1.02%	1.07%	0.38%	5.02%	0.02%	0.15%
32:Y	0.25%	12.21%	3.05%	0.16%	8.24%	0.46%	10.16%	0.26%	0.53%	2.72%	0.02%	4.30%	0.87%	0.44%	1.10%	9.68%	0.44%	0.17%	0.54%	44.41%
33:Y	0.39%	12.23%	2.99%	0.35%	13.64%	0.41%	7.32%	0.38%	0.26%	2.91%	0.02%	3.17%	1.20%	0.51%	0.93%	15.99%	0.59%	0.25%	0.55%	35.90%
34:M	1.47%	0.11%	0.08%	0.66%	3.46%	0.75%	0.06%	17.31%	1.62%	27.25%	19.38%	0.21%	1.90%	0.36%	2.70%	1.79%	6.26%	14.16%	0.45%	0.02%
35:H	0.63%	0.59%	2.88%	0.27%	0.79%	0.29%	48.77%	0.55%	1.80%	6.41%	0.09%	7.04%	8.73%	7.41%	7.43%	1.86%	1.15%	0.62%	0.08%	2.61%
36:W	0.04%	4.64%	0.02%	0.06%	0.14%	4.45%	0.03%	0.00%	0.02%	0.98%	0.02%	0.01%	0.07%	0.04%	6.26%	1.30%	0.02%	0.03%	81.60%	0.25%
37:V	5.04%	0.01%	0.25%	3.68%	0.16%	3.85%	0.02%	1.51%	0.70%	8.73%	5.94%	0.05%	0.66%	0.35%	0.56%	0.39%	1.08%	66.95%	0.05%	0.00%
38:R	0.05%	0.51%	0.01%	0.08%	0.01%	1.33%	0.41%	0.02%	0.25%	0.58%	0.00%	0.04%	1.87%	1.20%	91.75%	0.33%	0.07%	0.02%	1.45%	0.01%
39:Q	0.07%	0.00%	0.03%	1.27%	0.00%	0.11%	1.03%	0.00%	1.01%	1.71%	0.03%	0.05%	2.79%	85.97%	5.67%	0.08%	0.06%	0.04%	0.07%	0.01%
40:A	89.45%	0.03%	0.60%	0.22%	0.02%	1.90%	0.01%	0.09%	0.02%	0.02%	0.00%	0.06%	1.18%	0.00%	0.03%	1.09%	3.38%	1.89%	0.00%	0.01%
41:P	0.83%	0.06%	0.03%	0.01%	0.06%	0.07%	0.89%	0.06%	0.00%	2.44%	0.00%	0.03%	89.66%	0.22%	1.71%	2.40%	1.41%	0.09%	0.00%	0.02%
42:G	1.02%	0.06%	0.32%	2.59%	0.00%	87.07%	0.02%	0.06%	0.14%	0.06%	0.01%	0.02%	0.08%	0.07%	7.53%	0.35%	0.15%	0.40%	0.03%	0.00%
43:Q	0.11%	0.06%	0.47%	1.32%	0.06%	0.15%	24.52%	0.15%	0.92%	4.20%	0.01%	1.16%	4.29%	53.93%	7.53%	0.33%	0.20%	0.18%	0.01%	0.39%
44:G	0.80%	0.18%	0.70%	2.58%	0.00%	90.56%	0.02%	0.03%	0.07%	0.06%	0.03%	0.02%	0.04%	0.04%	3.10%	0.49%	0.08%	0.76%	0.43%	0.01%
45:L	0.17%	0.08%	0.04%	0.01%	2.33%	0.05%	1.11%	1.55%	0.00%	77.07%	0.04%	0.05%	12.59%	0.18%	1.52%	0.37%	0.24%	2.56%	0.00%	0.03%
46:E	4.23%	0.02%	16.28%	58.26%	0.03%	7.53%	0.44%	0.08%	4.23%	0.37%	0.27%	0.48%	0.37%	3.69%	0.61%	0.20%	0.65%	2.13%	0.05%	0.11%
47:W	0.20%	7.65%	0.10%	0.39%	0.37%	4.28%	0.09%	0.04%	0.38%	2.06%	0.14%	0.06%	0.22%	0.12%	9.55%	3.68%	0.21%	0.25%	69.61%	0.60%
48:M	1.56%	0.00%	0.02%	0.92%	0.08%	0.67%	0.01%	3.46%	4.99%	12.32%	46.51%	0.08%	0.63%	0.39%	5.17%	0.40%	7.70%	15.01%	0.10%	0.00%
49:G	8.80%	0.07%	3.73%	17.68%	0.03%	52.40%	0.10%	0.68%	1.47%	0.63%	0.10%	0.31%	0.68%	0.42%	7.53%	0.89%	1.62%	2.77%	0.06%	0.03%
50:W	0.15%	6.11%	0.12%	0.34%	0.50%	6.27%	0.32%	0.05%	0.20%	3.52%	0.10%	0.13%	0.52%	0.41%	13.79%	4.14%	0.14%	0.25%	61.99%	0.95%
51:I	0.56%	0.07%	0.14%	0.04%	1.71%	0.24%	0.05%	70.25%	0.40%	5.24%	2.97%	1.10%	0.28%	0.02%	1.40%	2.53%	4.79%	8.18%	0.01%	0.02%
52:N	0.46%	0.53%	5.30%	0.99%	0.27%	0.81%	5.12%	2.86%	14.33%	0.47%	0.42%	49.59%	0.46%	0.71%	3.34%	6.32%	5.63%	0.35%	0.03%	2.01%
53:P	3.01%	0.31%	0.09%	0.03%	0.40%	0.17%	1.06%	0.29%	0.01%	3.16%	0.01%	0.10%	79.53%	0.17%	2.22%	5.52%	3.41%	0.40%	0.01%	0.10%
54:N	0.91%	0.65%	13.19%	1.56%	0.77%	1.46%	6.01%	4.21%	7.68%	0.86%	0.37%	43.42%	0.39%	0.96%	4.28%	5.97%	4.00%	0.83%	0.04%	2.45%
55:S	0.56%	5.43%	0.74%	0.09%	0.39%	6.83%	0.79%	2.88%	0.72%	0.29%	0.10%	5.89%	0.47%	0.08%	11.11%	55.35%	7.33%	0.33%	0.19%	0.43%
56:G	6.22%	2.73%	8.62%	0.93%	0.27%	66.17%	0.71%	0.42%	0.08%	0.32%	0.01%	0.88%	0.40%	0.07%	3.23%	5.64%	0.67%	2.12%	0.12%	0.40%
57:G	6.97%	0.77%	12.87%	2.28%	0.12%	66.55%	0.32%	0.20%	0.08%	0.18%	0.01%	0.31%	0.16%	0.05%	3.08%	0.90%	0.31%	4.51%	0.04%	0.29%
58:T	5.60%	0.02%	0.09%	0.93%	0.04%	0.60%	0.02%	3.97%	1.89%	0.72%	0.50%	0.31%	4.37%	0.11%	6.20%	4.74%	69.33%	0.56%	0.01%	0.01%
59:N	0.51%	0.98%	10.71%	1.74%	0.76%	0.76%	9.28%	3.54%	9.06%	0.78%	0.56%	39.76%	0.60%	1.25%	2.44%	5.64%	4.96%	0.57%	0.06%	6.03%
60:Y	0.35%	12.22%	3.19%	0.39%	13.15%	0.43%	7.03%	0.37%	0.29%	2.21%	0.02%	3.30%	1.08%	0.53%	0.94%	14.92%	0.58%	0.24%	0.37%	38.38%
61:A	41.35%	0.03%	0.88%	9.25%	0.09%	2.73%	0.08%	1.23%	0.78%	1.54%	0.14%	0.40%	0.09%	11.08%	0.57%	1.17%	8.21%	18.87%	1.86%	0.02%
62:Q	0.27%	0.02%	0.45%	6.86%	0.01%	0.47%	3.32%	0.02%	2.34%	3.85%	0.17%	0.11%	3.15%	71.17%	6.95%	0.15%	0.13%	0.33%	0.16%	0.08%
63:K	0.69%	0.02%	0.70%	5.15%	0.03%	0.86%	0.41%	1.91%	55.32%	0.47%	4.06%	9.85%	0.32%	2.37%	7.89%	1.52%	7.73%	0.46%	0.14%	0.08%
64:F	0.41%																			