

	A	C	D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	V	W	Y
1:Q	0.56%	0.02%	0.51%	5.47%	0.02%	0.55%	4.62%	0.09%	5.53%	6.30%	0.46%	0.47%	6.02%	60.98%	6.48%	0.34%	0.54%	0.55%	0.26%	0.23%
2:V	5.29%	0.03%	0.24%	4.02%	0.43%	3.64%	0.01%	3.21%	0.66%	8.76%	6.60%	0.06%	0.33%	0.16%	0.63%	0.32%	1.04%	64.52%	0.06%	0.00%
3:Q	0.13%	0.08%	0.37%	1.55%	0.06%	0.20%	12.08%	0.15%	6.12%	3.55%	0.14%	1.29%	2.76%	64.47%	5.55%	0.31%	0.41%	0.15%	0.40%	0.22%
4:L	1.09%	0.03%	0.04%	0.62%	0.85%	0.54%	0.06%	1.04%	0.58%	66.12%	6.36%	0.03%	2.76%	0.93%	1.72%	1.44%	0.78%	14.64%	0.36%	0.01%
5:V	5.13%	0.02%	0.25%	3.93%	0.34%	3.66%	0.02%	2.87%	0.67%	8.97%	6.46%	0.06%	0.43%	0.22%	0.61%	0.29%	1.15%	64.87%	0.05%	0.00%
6:Q	0.29%	0.04%	0.19%	1.05%	0.05%	0.30%	7.35%	0.06%	3.99%	10.14%	0.33%	0.06%	6.44%	58.90%	7.43%	0.61%	0.17%	0.48%	1.07%	0.14%
7:S	2.13%	2.49%	0.04%	0.00%	2.49%	0.08%	0.07%	0.09%	0.00%	0.39%	0.00%	0.04%	4.96%	0.00%	0.12%	84.22%	1.95%	0.11%	0.09%	0.71%
8:G	0.73%	0.01%	0.11%	3.21%	0.00%	90.66%	0.00%	0.00%	0.11%	0.07%	0.04%	0.00%	0.03%	0.08%	3.08%	0.05%	0.07%	0.80%	0.92%	0.00%
9:A	61.14%	0.07%	0.52%	0.06%	0.10%	1.36%	0.09%	0.52%	0.01%	0.29%	0.01%	0.16%	9.83%	0.01%	0.15%	4.39%	19.79%	1.46%	0.00%	0.03%
10:E	3.58%	0.01%	7.89%	68.90%	0.01%	6.87%	0.44%	0.05%	3.64%	0.28%	0.18%	0.46%	0.35%	4.13%	0.55%	0.16%	0.54%	1.80%	0.04%	0.12%
11:V	6.19%	0.01%	0.30%	5.06%	0.13%	5.15%	0.01%	1.37%	0.41%	8.89%	8.38%	0.02%	0.23%	0.09%	0.50%	0.31%	0.75%	62.07%	0.13%	0.00%
12:K	0.47%	0.01%	0.38%	5.37%	0.01%	0.85%	0.18%	0.84%	57.48%	0.41%	6.28%	2.41%	0.23%	3.91%	13.84%	0.53%	6.13%	0.44%	0.20%	0.02%
13:K	0.40%	0.01%	0.27%	5.69%	0.00%	1.10%	0.07%	0.48%	61.83%	0.39%	5.62%	1.26%	0.18%	3.13%	13.29%	0.36%	5.23%	0.43%	0.24%	0.01%
14:P	4.48%	0.36%	0.05%	0.01%	0.37%	0.10%	0.53%	0.17%	0.03%	1.51%	0.01%	0.15%	72.96%	0.08%	1.18%	11.77%	5.86%	0.26%	0.04%	0.08%
15:G	0.51%	0.01%	0.08%	2.37%	0.00%	92.02%	0.00%	0.00%	0.09%	0.06%	0.03%	0.00%	0.02%	0.07%	3.12%	0.04%	0.05%	0.60%	0.92%	0.00%
16:A	90.78%	0.01%	1.19%	0.05%	0.01%	1.02%	0.02%	0.07%	0.01%	0.02%	0.01%	0.06%	1.50%	0.00%	0.01%	0.89%	2.80%	1.54%	0.00%	0.01%
17:S	1.65%	0.17%	0.01%	0.10%	0.24%	0.04%	0.01%	0.05%	0.01%	2.46%	0.00%	0.00%	6.43%	0.04%	0.10%	87.19%	1.24%	0.05%	0.10%	0.07%
18:V	3.36%	0.00%	0.20%	3.36%	0.11%	3.02%	0.01%	1.06%	0.21%	10.46%	6.00%	0.01%	0.30%	0.15%	0.31%	0.16%	0.42%	70.80%	0.05%	0.00%
19:K	0.26%	0.01%	0.55%	6.04%	0.01%	0.42%	0.32%	0.44%	71.76%	0.15%	0.99%	5.75%	0.14%	4.26%	4.57%	0.87%	3.23%	0.11%	0.07%	0.06%
20:V	9.10%	0.03%	3.67%	0.20%	0.33%	4.53%	0.03%	1.22%	0.03%	1.04%	0.18%	0.10%	0.11%	0.00%	0.05%	0.14%	0.27%	78.98%	0.00%	0.02%
21:S	3.28%	2.05%	0.10%	0.00%	2.20%	0.11%	0.24%	0.08%	0.01%	0.87%	0.01%	0.10%	8.82%	0.01%	0.20%	78.78%	1.44%	0.20%	0.11%	1.40%
22:C	0.25%	62.62%	0.72%	0.03%	3.08%	2.70%	1.41%	0.07%	0.06%	1.12%	0.01%	0.65%	0.52%	0.05%	2.45%	8.38%	0.14%	0.11%	4.93%	10.69%
23:K	1.52%	0.01%	0.16%	6.67%	0.00%	0.95%	0.09%	0.21%	48.27%	0.61%	4.91%	0.93%	1.15%	3.74%	13.44%	0.88%	15.62%	0.53%	0.28%	0.02%
24:A	50.48%	0.12%	1.10%	0.07%	0.12%	1.61%	0.11%	0.67%	0.02%	0.26%	0.02%	0.36%	11.18%	0.01%	0.12%	6.57%	25.68%	1.45%	0.00%	0.06%
25:S	2.67%	11.66%	0.21%	0.01%	9.58%	0.25%	0.31%	0.21%	0.01%	1.69%	0.01%	0.17%	3.85%	0.02%	0.28%	64.77%	0.97%	0.42%	0.41%	2.50%
26:G	5.09%	0.04%	2.53%	10.93%	0.03%	70.34%	0.09%	0.29%	0.61%	0.36%	0.03%	0.14%	0.41%	0.31%	5.56%	0.36%	0.82%	2.01%	0.04%	0.03%
27:Y	0.44%	9.44%	9.59%	0.67%	7.14%	1.12%	12.87%	0.71%	0.91%	1.83%	0.03%	9.68%	0.76%	0.61%	1.55%	8.01%	0.64%	0.42%	0.23%	33.36%
28:T	10.03%	0.22%	0.26%	0.02%	0.36%	0.36%	0.12%	5.11%	0.28%	0.38%	0.50%	1.59%	7.00%	0.01%	0.64%	9.20%	62.86%	0.88%	0.02%	0.14%
29:F	0.13%	3.92%	0.06%	0.01%	67.52%	0.11%	0.16%	0.73%	0.01%	19.29%	0.05%	0.05%	0.65%	0.02%	0.24%	4.02%	0.06%	1.87%	0.15%	0.95%
30:T	7.69%	0.15%	0.20%	0.03%	0.28%	0.28%	0.12%	4.72%	0.19%	0.43%	0.22%	1.53%	5.32%	0.01%	1.05%	6.92%	70.06%	0.74%	0.01%	0.06%
31:S	1.00%	2.88%	0.82%	0.06%	0.20%	4.18%	0.81%	2.69%	0.52%	0.28%	0.07%	9.84%	0.85%	0.06%	7.02%	55.29%	12.74%	0.25%	0.10%	0.34%
32:Y	0.49%	12.03%	3.95%	0.28%	13.38%	0.47%	9.91%	0.28%	0.13%	2.12%	0.00%	2.61%	0.92%	1.05%	1.16%	12.77%	0.30%	0.39%	0.32%	37.43%
33:D	3.84%	0.56%	51.11%	10.61%	0.69%	5.90%	7.46%	0.67%	0.92%	0.56%	0.03%	7.54%	0.61%	0.81%	0.84%	1.88%	1.25%	1.72%	0.02%	2.97%
34:I	1.00%	0.38%	0.38%	0.05%	10.34%	0.49%	0.19%	45.62%	0.29%	16.38%	1.95%	1.32%	0.74%	0.03%	0.99%	2.07%	3.30%	14.27%	0.06%	0.16%
35:N	0.67%	0.47%	4.91%	0.84%	0.28%	0.77%	4.44%	2.98%	15.68%	0.44%	0.50%	44.57%	0.53%	1.02%	3.22%	7.38%	9.00%	0.40%	0.04%	1.84%
36:W	0.03%	4.39%	0.02%	0.06%	0.13%	4.18%	0.03%	0.00%	0.02%	0.95%	0.01%	0.01%	0.07%	0.03%	6.59%	1.22%	0.02%	0.03%	81.97%	0.23%
37:V	4.86%	0.00%	0.23%	3.52%	0.15%	3.62%	0.02%	1.40%	0.63%	8.28%	5.82%	0.04%	0.60%	0.31%	0.52%	0.36%	0.96%	68.65%	0.04%	0.00%
38:R	0.04%	0.45%	0.01%	0.08%	0.01%	1.20%	0.36%	0.01%	0.23%	0.54%	0.00%	0.04%	1.78%	1.15%	92.38%	0.02%	0.06%	0.87%	1.34%	0.01%
39:Q	0.07%	0.00%	0.02%	1.18%	0.00%	0.10%	0.99%	0.00%	0.93%	1.58%	0.02%	0.04%	2.63%	86.80%	5.38%	0.08%	0.05%	0.04%	0.06%	0.01%
40:A	90.13%	0.02%	1.19%	0.10%	0.01%	0.55%	0.01%	0.14%	0.01%	0.03%	0.00%	0.09%	1.15%	0.00%	0.03%	1.01%	3.12%	2.40%	0.00%	0.01%
41:T	4.74%	0.25%	0.26%	0.03%	0.29%	0.59%	0.15%	4.86%	0.26%	0.39%	0.15%	2.43%	5.28%	0.02%	0.70%	11.37%	67.41%	0.74%	0.01%	0.07%
42:G	0.97%	0.05%	0.28%	2.35%	0.00%	88.04%	0.01%	0.05%	0.12%	0.06%	0.01%	0.02%	0.07%	0.06%	7.06%	0.30%	0.14%	0.38%	0.03%	0.00%
43:Q	0.10%	0.05%	0.41%	1.26%	0.05%	0.13%	24.06%	0.13%	0.86%	4.05%	0.01%	1.08%	4.04%	55.64%	7.12%	0.30%	0.18%	0.16%	0.01%	0.36%
44:G	0.75%	0.15%	0.62%	2.43%	0.00%	91.25%	0.02%	0.02%	0.07%	0.05%	0.03%	0.02%	0.03%	0.04%	2.88%	0.44%	0.07%	0.70%	0.42%	0.00%
45:L	0.14%	0.07%	0.03%	0.01%	2.24%	0.04%	1.06%	1.47%	0.00%	78.46%	0.03%	0.04%	11.82%	0.15%	1.41%	0.32%	0.21%	2.47%	0.00%	0.03%
46:E	4.08%	0.01%	15.63%	60.28%	0.02%	7.13%	0.40%	0.07%	4.10%	0.32%	0.24%	0.43%	0.32%	3.51%	0.54%	0.18%	0.60%	1.99%	0.04%	0.10%
47:W	0.18%	7.37%	0.08%	0.36%	0.33%	4.09%	0.08%	0.03%	0.36%	1.98%	0.13%	0.06%	0.19%	0.11%	9.09%	3.50%	0.19%	0.22%	71.11%	0.54%
48:M	1.39%	0.00%	0.02%	0.84%	0.07%	0.58%	0.01%	3.26%	4.83%	11.82%	48.75%	0.07%	0.57%	0.34%	4.88%	0.35%	7.40%	14.72%	0.08%	0.00%
49:G	8.57%	0.06%	3.46%	17.39%	0.03%	53.99%	0.09%	0.68%	1.37%	0.58%	0.08%	0.26%	0.62%	0.38%	7.33%	0.82%	1.49%	2.72%	0.05%	0.03%
50:W	0.12%	5.66%	0.10%	0.28%	0.43%	5.97%	0.26%	0.04%	0.17%	3.10%	0.09%	0.11%	0.43%	0.35%	13.41%	3.70%	0.12%	0.21%	64.63%	0.81%
51:M	1.24%	0.01%	0.04%	0.79%	0.18%	0.75%	0.01%	9.97%	3.97%	11.23%	44.45%	0.21%	0.45%	0.29%	4.42%	0.65%	7.00%	14.12%	0.20%	0.00%
52:N	0.46%	0.28%	5.73%	0.89%	0.23%	0.96%	3.57%	7.03%	13.25%	0.48%	0.62%	46.16%	0.26%	0.52%	4.09%	8.67%	5.20%	0.58%	0.02%	1.01%
53:P	2.73%	0.27%	0.08%	0.02%	0.35%	0.14%	0.98%	0.25%	0.01%	3.02%	0.01%	0.08%	81.22%	0.14%	2.10%	5.03%	3.12%	0.36%	0.01%	0.08%
54:N	0.83%	0.59%	12.79%	1.44%	0.71%	1.33%	5.78%	4.09%	7.64%	0.76%	0.34%	45.66%	0.33%	0.89%	3.97%	5.87%	3.84%	0.74%	0.03%	2.38%
55:S	0.50%	5.25%	0.69%	0.07%	0.34%	6.54%	0.73%	2.76%	0.61%	0.26%	0.08%	5.79%	0.44%	0.06%	10.22%	57.82%	6.97%	0.30%	0.17%	0.40%
56:G	13.02%	1.55%	16.54%	2.37%	0.47%	47.67%	1.45%	0.75%	0.15%	0.69%	0.03%	1.81%	0.73%	0.16%	2.47%	3.62%	1.47%	4.14%	0.14%	0.77%
57:N	0.80%	0.60%	13.01%	1.87%	0.68%	1.47%	6.60%	4.02%	7.43%	0.67%	0.26%	44.00%	0.32%	0.72%	3.86%	5.99%	4.02%	0.89%	0.04%	2.73%
58:T	4.28%	0.02%	0.03%	0.43%	0.04%	0.42%	0.02%	4.45%	2.01%	0.62%	0.52%	0.17%	3.11%	0.09%	6.94%	3.76%	72.77%	0.32%	0.01%	0.01%
59:G	11.53%	0.34%	27.55%	1.63%	0.12%	49.29%	0.22%	0.28%	0.05%	0.35%	0.03%	0.32%	0.21%	0.03%	0.62%	0.83%	0.35%	6.09%	0.02%	0.14%
60:Y	0.24%	11.73%	2.15%	0.23%	12.33%	0.28%	7.57%	0.40%	0.33%	2.25%	0.01%	3.75%	0.94%	0.58%	0.91%	14.76%	0.59%	0.19%	0.33%	40.42%
61:A	43.23%	0.03%	0.80%	8.98%	0.07%	2.55%	0.07%	1.16%	0.72%	1.40%	0.13%	0.08%	10.88%	0.54%	1.06%	7.82%	18.63%	1.80%	0.02%	0.02%
62:Q	0.23%	0.01%	0.39%	6.65%	0.01%	0.41%	3.13%	0.02%	2.19%	3.67%	0.15%	0.10%	2.98%	72.65%	6.66%	0.13%	0.12%	0.30%	0.13%	0.07%
63:K	0.61%	0.02%	0.66%	4.93%	0.03%	0.74%	0.38%	1.79%	57.04%	0.42%	3.96%	9.89%	0.28%	2.30%	7.58%	1.45%	7.31%	0.42%	0.13%	0.08%
64:F	0.32																			