

	A	C	D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	V	W	Y
1:Q	0.21%	0.01%	0.21%	3.85%	0.00%	0.22%	3.30%	0.02%	3.87%	4.21%	0.20%	0.20%	4.10%	74.56%	4.27%	0.13%	0.22%	0.21%	0.10%	0.09%
2:V	3.51%	0.01%	0.09%	2.62%	0.16%	2.29%	0.00%	1.59%	0.28%	5.99%	5.36%	0.02%	0.12%	0.06%	0.21%	0.09%	0.40%	77.17%	0.02%	0.00%
3:Q	0.04%	0.02%	0.14%	0.79%	0.01%	0.07%	9.20%	0.04%	3.69%	2.00%	0.06%	0.54%	1.46%	78.36%	3.09%	0.08%	0.12%	0.05%	0.16%	0.09%
4:L	0.46%	0.01%	0.01%	0.26%	0.34%	0.20%	0.02%	0.43%	0.27%	76.97%	4.96%	0.01%	2.06%	0.71%	0.87%	0.59%	0.32%	11.36%	0.13%	0.00%
5:V	4.41%	0.00%	0.14%	3.06%	0.04%	2.65%	0.00%	0.86%	0.22%	6.09%	5.80%	0.01%	0.16%	0.05%	0.20%	0.08%	0.41%	75.83%	0.01%	0.00%
6:E	4.06%	0.00%	2.56%	80.43%	0.00%	5.75%	0.08%	0.01%	3.13%	0.12%	0.14%	0.09%	0.10%	1.31%	0.19%	0.04%	0.23%	1.71%	0.01%	0.01%
7:S	1.37%	1.45%	0.01%	0.00%	1.47%	0.03%	0.02%	0.03%	0.00%	0.14%	0.00%	0.02%	3.02%	0.00%	0.04%	90.85%	1.04%	0.04%	0.03%	0.44%
8:G	0.39%	0.01%	0.06%	1.75%	0.00%	94.64%	0.00%	0.00%	0.04%	0.02%	0.01%	0.00%	0.01%	0.03%	2.00%	0.02%	0.02%	0.44%	0.56%	0.00%
9:G	2.34%	0.01%	0.14%	6.03%	0.00%	72.08%	0.01%	0.18%	0.39%	0.15%	0.01%	0.02%	0.13%	0.07%	15.32%	1.79%	0.63%	0.71%	0.01%	0.00%
10:G	1.16%	0.61%	2.80%	0.05%	0.01%	93.09%	0.03%	0.02%	0.00%	0.01%	0.00%	0.05%	0.02%	0.00%	0.59%	0.76%	0.05%	0.69%	0.01%	0.03%
11:V	5.06%	0.00%	0.14%	3.12%	0.06%	2.69%	0.00%	0.63%	0.06%	5.81%	3.96%	0.01%	0.18%	0.07%	0.49%	0.14%	0.40%	77.14%	0.03%	0.00%
12:V	3.58%	0.01%	0.74%	0.07%	0.60%	1.59%	0.01%	2.74%	0.01%	1.88%	0.08%	0.02%	0.06%	0.00%	0.02%	0.06%	0.13%	88.39%	0.00%	0.00%
13:Q	0.05%	0.00%	0.03%	0.47%	0.00%	0.02%	1.43%	0.00%	0.60%	2.63%	0.03%	0.02%	2.96%	87.18%	4.32%	0.09%	0.07%	0.02%	0.03%	0.04%
14:P	2.99%	0.17%	0.02%	0.00%	0.17%	0.05%	0.37%	0.07%	0.01%	1.05%	0.00%	0.08%	82.80%	0.03%	0.84%	7.61%	3.57%	0.12%	0.01%	0.03%
15:G	1.54%	0.02%	0.48%	6.00%	0.00%	87.46%	0.01%	0.01%	0.13%	0.08%	0.05%	0.01%	0.04%	0.10%	1.87%	0.06%	0.10%	1.55%	0.51%	0.00%
16:R	0.16%	0.01%	0.01%	0.28%	0.00%	2.48%	0.01%	0.10%	6.60%	0.16%	2.43%	0.12%	0.08%	0.21%	83.13%	0.53%	2.87%	0.21%	0.61%	0.00%
17:S	1.58%	1.90%	0.06%	0.00%	1.74%	0.03%	0.07%	0.03%	0.00%	0.23%	0.00%	0.09%	3.65%	0.00%	0.05%	88.77%	0.77%	0.05%	0.04%	0.94%
18:L	0.03%	0.00%	0.00%	0.02%	0.09%	0.02%	0.05%	0.04%	0.02%	92.23%	0.57%	0.00%	2.85%	1.56%	1.27%	0.04%	0.04%	1.16%	0.01%	0.00%
19:R	0.04%	0.01%	0.01%	0.08%	0.00%	3.68%	0.00%	0.39%	1.32%	0.02%	0.02%	0.08%	0.03%	0.03%	92.21%	1.14%	0.91%	0.02%	0.01%	0.00%
20:L	0.09%	0.05%	0.02%	0.00%	2.32%	0.03%	0.94%	0.75%	0.00%	86.85%	0.03%	0.03%	4.54%	0.04%	1.36%	0.11%	0.06%	2.76%	0.00%	0.02%
21:S	2.18%	1.40%	0.04%	0.00%	1.48%	0.04%	0.09%	0.03%	0.00%	0.34%	0.00%	0.04%	5.79%	0.00%	0.09%	86.52%	0.91%	0.07%	0.04%	0.92%
22:C	0.09%	75.40%	0.13%	0.01%	2.99%	1.62%	0.41%	0.05%	0.01%	0.44%	0.00%	0.18%	0.26%	0.01%	3.68%	8.33%	0.10%	0.05%	1.95%	4.30%
23:A	87.17%	0.00%	0.14%	2.53%	0.01%	0.59%	0.00%	0.28%	0.08%	0.16%	0.02%	0.01%	1.55%	0.02%	0.08%	2.10%	4.62%	0.65%	0.00%	0.00%
24:A	56.17%	0.00%	0.22%	8.52%	0.01%	4.67%	0.01%	0.06%	0.26%	0.94%	0.87%	0.00%	2.66%	0.14%	0.13%	1.14%	3.35%	20.83%	0.02%	0.00%
25:S	1.71%	1.45%	0.02%	0.00%	1.46%	0.02%	0.04%	0.03%	0.00%	0.15%	0.00%	0.01%	3.73%	0.00%	0.04%	89.68%	1.16%	0.03%	0.03%	0.44%
26:G	3.98%	0.01%	0.73%	9.52%	0.00%	79.01%	0.02%	0.13%	0.36%	0.13%	0.01%	0.04%	0.16%	0.15%	3.64%	0.12%	0.37%	1.61%	0.01%	0.00%
27:F	0.07%	2.01%	0.04%	0.00%	74.60%	0.07%	0.10%	1.09%	0.00%	16.35%	0.03%	0.05%	0.35%	0.00%	0.19%	2.47%	0.05%	1.86%	0.04%	0.61%
28:T	4.86%	0.07%	0.07%	0.00%	0.13%	0.13%	0.05%	3.73%	0.11%	0.18%	0.24%	1.11%	3.38%	0.00%	0.30%	4.82%	80.44%	0.35%	0.00%	0.04%
29:F	0.04%	2.70%	0.02%	0.00%	76.17%	0.04%	0.06%	0.43%	0.00%	15.88%	0.03%	0.02%	0.24%	0.01%	0.08%	2.54%	0.02%	1.06%	0.06%	0.60%
30:S	0.64%	1.97%	0.83%	0.07%	0.25%	2.90%	0.77%	6.91%	1.24%	0.32%	0.32%	14.46%	0.65%	0.04%	10.43%	44.69%	12.74%	0.37%	0.10%	0.29%
31:S	0.61%	2.51%	1.27%	0.12%	0.25%	6.49%	0.54%	2.64%	1.10%	0.26%	0.21%	9.69%	0.23%	0.04%	15.12%	52.51%	5.18%	0.43%	0.39%	4.33%
32:Y	0.10%	8.58%	1.81%	0.07%	9.23%	0.14%	5.97%	0.20%	0.19%	0.87%	0.00%	3.23%	0.33%	0.38%	0.41%	9.70%	0.24%	0.10%	0.11%	58.33%
33:G	5.08%	0.39%	10.72%	0.32%	0.03%	78.97%	0.07%	0.07%	0.01%	0.04%	0.00%	0.13%	0.06%	0.00%	0.70%	0.76%	0.13%	2.45%	0.01%	0.07%
34:M	0.44%	0.01%	0.01%	0.16%	0.55%	0.17%	0.01%	23.80%	2.60%	6.95%	47.27%	0.20%	0.28%	0.06%	3.85%	0.45%	7.35%	5.76%	0.07%	0.00%
35:H	0.23%	0.21%	1.74%	0.09%	0.32%	0.09%	65.43%	0.23%	0.85%	4.63%	0.02%	6.16%	6.36%	5.18%	5.16%	0.77%	0.45%	0.23%	0.02%	1.83%
36:W	0.01%	2.55%	0.00%	0.01%	0.05%	2.37%	0.00%	0.00%	0.00%	0.54%	0.00%	0.00%	0.01%	0.01%	3.47%	0.65%	0.01%	0.01%	90.20%	0.09%
37:V	3.61%	0.01%	0.74%	0.04%	0.37%	1.57%	0.01%	1.60%	0.01%	0.61%	0.03%	0.02%	0.03%	0.00%	0.30%	4.82%	80.44%	0.35%	0.00%	0.04%
38:R	0.02%	2.32%	0.07%	0.00%	0.01%	1.32%	1.44%	0.00%	0.00%	0.38%	0.00%	0.03%	0.62%	0.04%	93.27%	0.35%	0.00%	0.02%	0.04%	0.07%
39:Q	0.03%	0.00%	0.01%	1.06%	0.00%	0.03%	0.78%	0.00%	0.72%	1.25%	0.02%	0.01%	3.51%	89.68%	2.77%	0.02%	0.07%	0.01%	0.01%	0.00%
40:A	60.26%	0.06%	0.39%	0.06%	0.07%	1.08%	0.02%	0.43%	0.01%	0.10%	0.00%	0.12%	9.50%	0.00%	0.06%	4.95%	21.41%	1.45%	0.00%	0.01%
41:P	1.31%	0.00%	0.00%	0.03%	0.00%	0.01%	0.14%	0.03%	0.01%	2.98%	0.00%	0.00%	92.68%	0.56%	0.54%	1.29%	0.36%	0.04%	0.00%	0.00%
42:G	1.25%	0.24%	2.92%	0.11%	0.01%	92.69%	0.04%	0.03%	0.01%	0.03%	0.00%	0.06%	0.02%	0.00%	0.50%	0.54%	0.04%	1.46%	0.01%	0.03%
43:K	0.76%	0.00%	0.03%	4.53%	0.00%	0.38%	0.02%	0.06%	58.84%	0.26%	4.83%	0.49%	0.57%	2.33%	11.58%	0.38%	14.55%	0.24%	0.13%	0.01%
44:G	0.31%	0.06%	0.12%	0.53%	0.00%	96.17%	0.00%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	1.93%	0.24%	0.01%	0.29%	0.28%	0.00%
45:L	0.04%	0.00%	0.00%	0.02%	0.03%	0.01%	0.03%	0.05%	0.01%	93.32%	0.39%	0.00%	3.10%	1.05%	0.85%	0.06%	0.03%	0.99%	0.01%	0.00%
46:E	3.95%	0.00%	10.85%	72.13%	0.00%	5.58%	0.20%	0.02%	2.95%	0.11%	0.13%	0.47%	0.10%	1.25%	0.20%	0.06%	0.25%	1.66%	0.01%	0.07%
47:W	0.02%	2.76%	0.00%	0.03%	0.05%	2.85%	0.00%	0.00%	0.02%	1.08%	0.02%	0.00%	0.03%	0.02%	6.59%	1.15%	0.02%	0.03%	85.27%	0.06%
48:V	4.28%	0.00%	0.03%	3.04%	0.02%	2.65%	0.00%	0.33%	0.24%	5.24%	4.88%	0.00%	0.23%	0.11%	0.15%	0.07%	0.35%	78.36%	0.01%	0.00%
49:A	75.95%	0.00%	0.11%	1.80%	0.00%	1.05%	0.00%	0.20%	0.09%	0.20%	0.01%	0.01%	5.12%	0.03%	0.12%	3.11%	11.12%	1.06%	0.00%	0.00%
50:V	2.39%	0.03%	1.20%	0.14%	1.71%	1.32%	0.08%	7.68%	0.01%	9.15%	0.29%	0.11%	0.66%	0.01%	0.09%	0.23%	0.49%	74.39%	0.00%	0.01%
51:I	0.89%	0.03%	0.06%	0.55%	2.04%	0.32%	0.03%	46.33%	2.98%	19.70%	6.43%	0.37%	0.69%	0.27%	2.62%	1.33%	6.65%	8.70%	0.01%	0.01%
52:S	1.48%	0.33%	0.02%	0.26%	0.54%	0.06%	0.01%	0.06%	0.02%	1.87%	0.01%	0.01%	3.19%	0.02%	0.05%	90.43%	1.32%	0.70%	0.08%	0.15%
53:Y	0.15%	11.04%	2.72%	0.11%	12.37%	0.29%	8.24%	0.31%	0.08%	1.31%	0.00%	2.75%	0.55%	0.53%	0.81%	11.94%	0.24%	0.22%	0.16%	46.17%
54:D	1.91%	0.24%	68.58%	6.16%	0.26%	3.58%	5.71%	0.25%	0.54%	0.19%	0.01%	6.56%	0.21%	0.47%	0.28%	0.93%	0.49%	0.86%	0.00%	2.77%
55:G	1.44%	0.02%	0.54%	4.13%	0.00%	84.11%	0.01%	0.13%	0.13%	0.15%	0.01%	0.02%	0.15%	0.09%	7.87%	0.17%	0.27%	0.74%	0.01%	0.00%
56:S	0.68%	2.98%	1.25%	0.08%	0.36%	3.81%	1.03%	6.56%	0.73%	0.48%	0.19%	11.91%	0.78%	0.07%	6.64%	51.51%	9.86%	0.53%	0.07%	0.49%
57:N	0.59%	0.41%	9.05%	0.92%	0.53%	0.74%	4.47%	4.37%	5.63%	0.45%	0.17%	53.79%	0.29%	0.55%	1.02%	8.61%	5.80%	0.38%	0.01%	2.22%
58:K	0.62%	0.02%	1.75%	8.48%	0.06%	0.57%	0.75%	3.45%	53.95%	0.44%	0.28%	11.46%	0.35%	3.83%	5.85%	1.13%	6.54%	0.24%	0.01%	0.22%
59:Y	0.08%	8.92%	4.29%	0.14%	5.65%	0.36%	5.93%	0.13%	0.24%	0.88%	0.01%	3.88%	0.19%	0.13%	0.41%	4.87%	0.14%	0.11%	0.18%	63.46%
60:Y	0.12%	8.88%	2.40%	0.14%	9.64%	0.12%	5.16%	0.12%	0.13%	0.82%	0.00%	2.46%	0.37%	0.20%	0.33%	9.86%	0.21%	0.06%	0.13%	58.82%
61:A	64.04%	0.01%	0.13%	1.74%	0.01%	0.47%	0.01%	1.14%	0.28%	0.44%	0.06%	0.03%	8.98%	0.06%	0.28%	5.59%	16.05%	0.69%	0.00%	0.00%
62:D	0.96%	0.02%	92.15%	3.53%	0.01%	1.50%	0.31%	0.02%	0.09%	0.01%	0.00%	0.59%	0.01%	0.05%	0.01%	0.03%	0.03%	0.39%	0.00%	0.28%
63:S	0.45%	1.54%	0.02%	0.00%	1.51%	0.04%	0.05%	0.03%	0.00%	0.23%	0.00%	0.02%	2.49%	0.0						