

	A	C	D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	V	W	Y
1:Q	0.32%	0.01%	0.30%	4.58%	0.01%	0.33%	6.44%	0.03%	4.61%	5.00%	0.29%	0.25%	4.85%	66.60%	5.18%	0.18%	0.32%	0.32%	0.16%	0.22%
2:S	1.69%	1.82%	0.02%	0.00%	1.84%	0.04%	0.04%	0.04%	0.00%	0.22%	0.00%	0.02%	3.79%	0.00%	0.07%	88.37%	1.36%	0.06%	0.05%	0.55%
3:A	75.34%	0.04%	4.62%	0.14%	0.06%	5.51%	0.01%	0.17%	0.01%	0.10%	0.01%	0.04%	0.82%	0.00%	0.03%	0.56%	1.42%	11.08%	0.00%	0.02%
4:L	0.05%	0.00%	0.00%	0.04%	0.03%	0.02%	0.02%	0.02%	0.03%	90.31%	0.75%	0.00%	3.43%	1.97%	1.78%	0.06%	0.06%	1.41%	0.03%	0.00%
5:T	6.37%	0.05%	0.05%	0.01%	0.05%	0.17%	0.03%	2.72%	0.08%	0.09%	0.06%	0.89%	4.14%	0.00%	0.21%	4.88%	79.98%	0.21%	0.00%	0.01%
6:Q	0.13%	0.00%	0.09%	2.71%	0.00%	0.19%	1.72%	0.00%	0.81%	4.27%	0.04%	0.01%	4.91%	77.21%	7.56%	0.06%	0.06%	0.10%	0.10%	0.01%
7:P	3.26%	0.26%	0.03%	0.00%	0.15%	0.07%	0.33%	0.10%	0.01%	0.56%	0.00%	0.10%	81.44%	0.02%	0.89%	8.62%	4.03%	0.09%	0.00%	0.04%
8:R	0.18%	1.94%	0.28%	0.01%	0.14%	1.37%	18.55%	0.03%	0.02%	5.24%	0.00%	0.17%	7.67%	0.50%	62.41%	0.79%	0.09%	0.12%	0.14%	0.34%
9:S	1.28%	0.12%	0.01%	0.06%	0.16%	0.02%	0.00%	0.04%	0.01%	2.00%	0.00%	0.00%	3.91%	0.02%	0.04%	91.51%	0.70%	0.04%	0.06%	0.04%
10:V	3.01%	0.00%	0.40%	3.00%	0.09%	2.42%	0.01%	0.51%	0.20%	7.88%	4.96%	0.00%	0.20%	0.10%	0.18%	6.10%	0.38%	76.81%	0.04%	0.00%
11:S	2.91%	0.48%	0.03%	0.00%	0.91%	0.03%	0.05%	0.05%	0.00%	0.16%	0.00%	0.03%	5.12%	0.00%	0.03%	88.25%	1.47%	0.06%	0.01%	0.40%
12:G	1.61%	0.01%	0.23%	6.22%	0.00%	88.49%	0.01%	0.01%	0.15%	0.10%	0.07%	0.01%	0.04%	0.14%	0.99%	0.05%	0.10%	1.58%	0.20%	0.00%
13:S	3.61%	1.89%	0.03%	0.00%	1.50%	0.06%	0.05%	0.10%	0.00%	0.25%	0.00%	0.04%	7.09%	0.00%	0.09%	81.94%	2.82%	0.10%	0.05%	0.39%
14:P	1.70%	0.15%	0.05%	0.01%	0.14%	0.07%	1.60%	0.13%	0.01%	3.49%	0.01%	0.07%	87.45%	0.18%	1.51%	2.16%	1.13%	0.12%	0.01%	0.04%
15:G	0.72%	0.02%	0.16%	1.84%	0.00%	91.08%	0.01%	0.04%	0.07%	0.03%	0.00%	0.01%	0.04%	0.03%	5.40%	0.18%	0.08%	0.29%	0.01%	0.00%
16:Q	0.04%	0.01%	0.08%	0.81%	0.00%	0.05%	7.21%	0.01%	0.61%	5.19%	0.04%	0.23%	3.20%	76.42%	5.80%	0.08%	0.04%	0.05%	0.05%	0.07%
17:S	3.09%	0.06%	0.00%	0.05%	0.10%	0.03%	0.00%	0.03%	0.01%	1.31%	0.00%	0.00%	5.27%	0.02%	0.05%	88.09%	1.75%	0.04%	0.06%	0.02%
18:V	4.90%	0.04%	1.57%	0.10%	1.88%	2.97%	0.04%	4.24%	0.01%	6.14%	0.11%	0.05%	0.21%	0.00%	0.10%	0.14%	0.20%	77.27%	0.00%	0.02%
19:T	5.96%	0.08%	0.09%	0.01%	0.15%	0.15%	0.06%	3.72%	0.07%	0.23%	0.08%	1.18%	4.25%	0.00%	0.61%	5.50%	77.41%	0.41%	0.00%	0.03%
20:I	0.43%	0.11%	0.11%	0.02%	4.74%	0.18%	0.07%	64.88%	0.35%	5.98%	4.96%	1.59%	0.30%	0.01%	0.37%	1.78%	4.79%	9.28%	0.01%	0.05%
21:S	2.57%	1.85%	0.06%	0.00%	1.95%	0.06%	0.15%	0.05%	0.01%	0.53%	0.00%	0.07%	6.78%	0.00%	0.12%	83.29%	1.12%	0.12%	0.07%	1.20%
22:C	0.14%	72.78%	0.42%	0.02%	2.77%	1.90%	0.86%	0.03%	0.02%	0.35%	0.00%	0.42%	0.28%	0.02%	1.81%	6.50%	0.08%	0.06%	2.07%	9.48%
23:T	5.78%	0.37%	0.21%	0.01%	0.25%	0.51%	0.11%	4.01%	0.16%	0.27%	0.08%	1.89%	9.03%	0.01%	0.46%	10.89%	65.29%	0.60%	0.00%	0.06%
24:G	1.87%	0.01%	0.61%	5.27%	0.00%	85.22%	0.01%	0.11%	0.17%	0.12%	0.01%	0.02%	0.12%	0.08%	5.09%	0.11%	0.22%	0.94%	0.02%	0.01%
25:T	6.97%	0.31%	0.84%	0.06%	0.79%	0.98%	0.41%	11.84%	0.50%	0.76%	0.38%	6.01%	3.13%	0.03%	2.62%	11.22%	50.99%	1.98%	0.01%	0.18%
26:S	0.41%	1.96%	0.54%	0.05%	0.16%	3.93%	0.62%	3.01%	1.43%	0.24%	0.17%	9.02%	0.36%	0.06%	36.51%	34.42%	6.39%	0.28%	0.09%	0.34%
27:S	0.43%	6.18%	0.54%	0.03%	0.26%	5.83%	0.45%	2.35%	0.22%	0.19%	0.04%	5.19%	0.47%	0.02%	8.67%	63.55%	4.95%	0.20%	0.14%	0.31%
28:D	2.69%	0.31%	56.76%	16.81%	0.32%	4.58%	5.33%	0.31%	0.56%	0.27%	0.01%	5.74%	0.24%	0.50%	0.39%	1.06%	0.47%	1.11%	0.00%	2.53%
29:V	3.75%	0.14%	1.63%	0.14%	5.91%	2.00%	0.16%	8.23%	0.02%	10.02%	0.15%	0.27%	0.92%	0.01%	0.12%	0.90%	0.99%	64.57%	0.00%	0.07%
30:G	4.66%	1.24%	8.06%	0.55%	0.11%	77.51%	0.15%	0.20%	0.02%	0.14%	0.00%	0.24%	0.33%	0.01%	1.23%	3.13%	0.63%	1.67%	0.03%	0.09%
31:G	6.52%	1.96%	9.34%	0.65%	0.17%	69.75%	0.55%	0.21%	0.03%	0.21%	0.00%	0.86%	0.26%	0.03%	2.04%	4.34%	0.59%	2.12%	0.06%	0.32%
32:Y	0.37%	10.20%	3.09%	0.19%	13.54%	0.29%	8.17%	0.20%	0.13%	2.19%	0.01%	2.16%	0.60%	0.78%	0.75%	12.51%	0.20%	0.28%	0.30%	44.03%
33:N	0.81%	0.43%	11.34%	1.16%	0.63%	1.02%	4.93%	4.96%	8.52%	0.76%	0.42%	48.02%	0.38%	0.44%	1.56%	5.91%	5.43%	0.70%	0.03%	2.54%
34:Y	0.17%	10.03%	2.59%	0.41%	11.20%	0.20%	5.87%	0.18%	0.13%	1.03%	0.00%	2.87%	0.55%	0.29%	0.51%	11.59%	0.32%	0.11%	0.12%	51.84%
35:V	4.41%	0.03%	1.40%	0.07%	1.46%	2.12%	0.02%	1.95%	0.00%	3.03%	0.12%	0.03%	0.11%	0.00%	0.04%	0.09%	0.15%	84.93%	0.00%	0.01%
36:S	2.59%	1.67%	0.06%	0.00%	1.75%	0.06%	0.15%	0.05%	0.00%	0.51%	0.00%	0.06%	6.99%	0.01%	0.12%	83.55%	1.13%	0.12%	0.06%	1.13%
37:W	0.21%	13.89%	0.18%	0.33%	0.60%	10.66%	0.13%	0.01%	0.04%	0.90%	0.02%	0.06%	0.12%	0.09%	4.23%	2.00%	0.04%	0.13%	64.80%	1.56%
38:Y	0.24%	10.16%	7.86%	0.33%	4.77%	0.53%	8.66%	0.76%	1.44%	1.04%	0.03%	12.00%	0.30%	0.23%	0.83%	5.41%	0.43%	0.24%	0.17%	44.56%
39:Q	0.09%	0.02%	0.22%	2.37%	0.03%	0.13%	12.40%	0.10%	1.35%	3.02%	0.01%	0.23%	3.65%	71.67%	4.16%	0.10%	0.13%	0.10%	0.00%	0.22%
40:Q	0.19%	0.06%	0.46%	5.22%	0.06%	0.31%	7.98%	0.09%	5.57%	3.22%	0.23%	0.71%	2.21%	66.55%	5.51%	0.24%	0.23%	0.31%	0.40%	0.44%
41:H	0.29%	0.74%	5.48%	0.27%	0.49%	0.33%	44.61%	1.44%	3.01%	3.15%	0.07%	23.62%	1.68%	1.22%	5.00%	2.27%	0.92%	0.27%	0.02%	5.14%
42:P	1.69%	0.00%	0.00%	0.11%	0.01%	0.04%	0.13%	0.08%	0.03%	1.53%	0.01%	0.00%	87.70%	0.59%	0.98%	4.32%	2.72%	0.06%	0.00%	0.00%
43:G	1.55%	0.28%	3.63%	0.15%	0.02%	90.72%	0.06%	0.05%	0.01%	0.05%	0.00%	0.09%	0.03%	0.00%	0.65%	0.65%	0.06%	1.94%	0.01%	0.05%
44:K	0.46%	0.03%	0.50%	3.85%	0.02%	0.51%	0.37%	3.45%	56.97%	0.24%	0.57%	7.46%	0.31%	1.61%	10.71%	1.13%	11.45%	0.23%	0.01%	0.12%
45:A	47.55%	0.06%	10.23%	0.40%	0.12%	12.94%	0.08%	0.43%	0.02%	0.33%	0.02%	0.15%	0.74%	0.00%	0.08%	0.67%	1.51%	24.64%	0.00%	0.04%
46:P	0.75%	0.02%	0.01%	0.00%	0.03%	0.01%	0.97%	0.02%	0.00%	1.55%	0.00%	0.01%	93.81%	0.03%	0.62%	1.33%	0.78%	0.05%	0.00%	0.02%
47:K	0.41%	0.01%	0.46%	4.07%	0.03%	0.23%	0.45%	5.93%	57.10%	0.51%	0.56%	6.07%	0.41%	4.74%	9.54%	0.75%	8.39%	0.28%	0.00%	0.08%
48:L	0.57%	0.28%	0.14%	0.01%	12.48%	0.25%	0.84%	3.62%	0.01%	63.93%	0.13%	0.08%	3.69%	0.05%	1.26%	0.71%	0.27%	11.57%	0.01%	0.11%
49:M	0.42%	0.01%	0.02%	0.24%	0.36%	0.29%	0.01%	15.44%	4.08%	8.09%	49.18%	0.31%	0.28%	0.16%	6.47%	0.47%	7.97%	6.06%	0.12%	0.00%
50:I	0.86%	0.07%	0.25%	0.02%	2.13%	0.30%	0.14%	65.57%	0.24%	3.97%	1.59%	3.19%	0.54%	0.01%	0.27%	3.26%	11.99%	5.58%	0.00%	0.04%
51:Y	0.30%	10.18%	5.75%	0.32%	11.04%	0.33%	9.23%	0.21%	0.14%	1.24%	0.00%	3.46%	0.50%	0.70%	0.62%	10.56%	0.27%	0.27%	0.19%	44.68%
52:D	2.34%	0.33%	54.36%	17.58%	0.36%	4.36%	5.92%	0.35%	0.75%	0.28%	0.01%	6.42%	0.31%	0.66%	0.43%	1.25%	0.63%	1.05%	0.00%	2.62%
53:V	4.94%	0.03%	1.51%	0.06%	1.32%	2.39%	0.02%	2.03%	0.00%	2.85%	0.07%	0.03%	0.14%	0.00%	0.05%	0.11%	0.18%	84.25%	0.00%	0.01%
54:S	0.88%	2.33%	0.98%	0.08%	0.34%	3.25%	1.01%	7.92%	1.27%	0.47%	0.30%	15.95%	0.94%	0.10%	6.93%	41.70%	14.55%	0.52%	0.08%	0.39%
55:K	0.67%	0.02%	1.06%	11.78%	0.04%	1.04%	0.43%	0.72%	55.94%	0.84%	3.36%	4.69%	0.41%	5.42%	7.65%	0.76%	4.27%	0.45%	0.36%	0.12%
56:R	0.08%	0.45%	0.01%	0.10%	0.01%	4.92%	0.09%	0.00%	0.40%	0.82%	0.07%	0.02%	0.94%	1.53%	71.20%	0.40%	0.10%	0.07%	18.80%	0.01%
57:P	1.47%	0.01%	0.02%	0.00%	0.02%	0.01%	0.93%	0.01%	0.01%	0.56%	0.00%	0.14%	94.29%	0.03%	0.28%	1.61%	0.58%	0.02%	0.00%	0.01%
58:S	1.41%	0.09%	0.00%	0.07%	0.18%	0.02%	0.00%	0.03%	0.01%	1.96%	0.00%	0.00%	4.80%	0.02%	0.06%	90.30%	0.92%	0.03%	0.05%	0.04%
59:G	0.39%	0.02%	0.16%	1.53%	0.00%	95.61%	0.00%	0.00%	0.03%	0.02%	0.01%	0.00%	0.01%	0.03%	1.43%	0.06%	0.02%	0.42%	0.23%	0.00%
60:V	4.56%	0.01%	0.94%	0.16%	0.47%	2.05%	0.01%	2.26%	0.02%	1.11%	0.13%	0.03%	0.06%	0.01%	0.03%	0.08%	0.17%	87.90%	0.00%	0.00%
61:P	0.90%	0.10%	0.02%	0.00%	0.10%	0.05%	0.68%	0.08%	0.00%	1.80%	0.00%	0.03%	89.66%	0.06%	1.35%	3.33%	1.69%	0.11%	0.00%	0.03%
62:D	2.68%	0.34%	63.23%	2.09%	0.32%	6.16%	7.17%	0.50%	0.23%	0.33%	0.01%	8.06%	0.55%	0.31%	0.62%	1.40%	0.85%	1.52%	0.00%	3.64%
63:R	0.25%	2.14%	0.50%	0.02%	0.23%	1.47%	16.93%	0.06%	0.03%	4.64%	0.00%	0.32%	6.90%	0.43%	64.15%	0.90%	0.14%	0.22%	0.12%	0.57%
64:F	0.05%	2.29%																		