

	A	C	D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	V	W	Y
1:Q	0.51%	0.02%	0.48%	5.35%	0.02%	0.50%	4.55%	0.08%	5.39%	6.13%	0.43%	0.45%	5.89%	6.35%	0.32%	0.51%	0.52%	0.24%	0.21%	
2:V	5.21%	0.03%	0.23%	3.88%	0.40%	3.52%	0.01%	3.11%	0.61%	8.58%	6.57%	0.05%	0.31%	0.15%	0.59%	0.30%	0.99%	65.42%	0.06%	0.00%
3:Q	0.11%	0.07%	0.35%	1.48%	0.05%	0.17%	11.82%	0.14%	5.87%	3.42%	0.14%	1.20%	2.66%	65.75%	5.36%	0.28%	0.38%	0.14%	0.39%	0.21%
4:L	0.92%	0.10%	0.04%	0.63%	3.13%	0.51%	0.19%	2.50%	0.99%	61.78%	4.36%	0.10%	3.63%	1.91%	2.25%	1.61%	0.89%	13.91%	0.52%	0.02%
5:Q	0.09%	0.04%	0.13%	1.36%	0.02%	0.22%	4.01%	0.03%	4.57%	2.63%	0.09%	0.33%	1.91%	77.70%	5.64%	0.18%	0.18%	0.12%	0.69%	0.07%
6:E	6.30%	0.00%	4.07%	74.24%	0.00%	8.69%	0.08%	0.03%	1.97%	0.20%	0.21%	0.17%	0.11%	0.75%	0.27%	0.07%	0.30%	2.50%	0.03%	0.02%
7:S	3.58%	0.02%	0.00%	0.03%	0.03%	0.09%	0.00%	0.00%	0.02%	4.43%	0.09%	0.00%	4.91%	0.01%	0.17%	82.07%	2.00%	0.16%	2.39%	0.00%
8:G	1.30%	0.64%	2.69%	0.10%	0.01%	90.55%	0.04%	0.04%	0.02%	0.02%	0.00%	0.14%	0.04%	0.00%	1.14%	2.18%	0.13%	0.90%	0.03%	0.03%
9:P	0.66%	0.00%	0.00%	0.05%	0.01%	0.02%	0.19%	0.04%	0.02%	1.91%	0.00%	0.00%	92.48%	0.74%	1.21%	1.64%	0.99%	0.04%	0.00%	0.00%
10:G	0.85%	0.04%	0.39%	3.19%	0.00%	83.69%	0.01%	0.11%	0.15%	0.12%	0.01%	0.01%	0.10%	0.07%	10.43%	0.21%	0.17%	0.46%	0.01%	0.00%
11:L	0.10%	0.00%	0.00%	0.05%	0.11%	0.06%	0.09%	0.12%	0.03%	88.27%	0.51%	0.00%	3.87%	1.53%	3.35%	0.18%	0.08%	1.56%	0.07%	0.00%
12:V	5.93%	0.01%	0.28%	4.98%	0.09%	5.29%	0.01%	1.25%	0.45%	8.68%	7.96%	0.02%	0.31%	0.13%	0.46%	0.28%	0.89%	62.86%	0.11%	0.00%
13:K	0.33%	0.00%	0.26%	5.42%	0.01%	0.87%	0.11%	0.43%	62.01%	0.36%	5.63%	1.18%	0.18%	3.97%	13.29%	0.31%	5.13%	0.34%	0.18%	0.01%
14:P	4.29%	0.24%	0.09%	0.00%	0.33%	0.09%	0.74%	0.18%	0.01%	1.50%	0.01%	0.24%	74.43%	0.03%	0.65%	11.38%	5.45%	0.23%	0.01%	0.10%
15:S	2.73%	0.12%	0.00%	0.17%	0.15%	0.43%	0.00%	0.01%	0.04%	15.76%	0.17%	0.00%	3.45%	0.03%	0.66%	64.97%	0.78%	0.75%	9.75%	0.02%
16:G	4.25%	0.01%	0.49%	18.10%	0.00%	67.99%	0.01%	0.03%	0.78%	0.27%	0.33%	0.02%	0.14%	0.30%	2.20%	0.11%	0.35%	4.17%	0.43%	0.00%
17:T	7.84%	0.07%	0.12%	0.03%	0.09%	0.22%	0.07%	3.00%	0.36%	0.13%	0.23%	2.27%	4.21%	0.01%	0.29%	4.21%	76.56%	0.27%	0.00%	0.03%
18:L	0.09%	0.00%	0.00%	0.10%	0.11%	0.04%	0.25%	0.06%	0.06%	83.09%	0.91%	0.00%	6.47%	3.73%	2.99%	0.13%	0.11%	1.81%	0.04%	0.00%
19:S	3.71%	2.79%	0.10%	0.01%	2.47%	0.09%	0.16%	0.09%	0.01%	0.51%	0.01%	0.12%	6.12%	0.00%	0.13%	80.23%	1.91%	0.11%	0.09%	1.32%
20:L	0.19%	0.13%	0.05%	0.01%	4.11%	0.08%	1.17%	1.00%	0.00%	80.92%	0.03%	0.02%	6.11%	0.09%	1.70%	0.17%	0.06%	4.13%	0.00%	0.03%
21:T	7.07%	0.14%	0.17%	0.02%	0.28%	0.28%	0.10%	4.86%	0.30%	0.46%	0.55%	1.49%	5.24%	0.01%	0.62%	6.92%	70.58%	0.82%	0.01%	0.08%
22:C	0.17%	69.79%	0.57%	0.02%	3.39%	2.47%	1.03%	0.05%	0.02%	0.66%	0.00%	0.56%	0.36%	0.03%	2.89%	7.38%	0.10%	0.08%	1.10%	9.33%
23:A	59.30%	0.20%	4.06%	0.91%	0.42%	9.07%	0.24%	1.09%	0.03%	1.01%	0.03%	0.33%	2.78%	0.03%	0.28%	2.44%	7.33%	10.40%	0.00%	0.06%
24:V	5.71%	0.03%	1.97%	0.12%	0.87%	2.69%	0.02%	1.45%	0.01%	2.04%	0.15%	0.03%	0.10%	0.00%	0.04%	0.10%	0.14%	84.52%	0.00%	0.01%
25:S	1.75%	3.43%	0.08%	0.01%	2.73%	0.16%	0.09%	0.07%	0.00%	0.48%	0.00%	0.06%	4.16%	0.01%	0.16%	84.40%	1.25%	0.18%	0.11%	0.88%
26:G	5.16%	1.30%	8.28%	0.81%	0.13%	73.21%	0.64%	0.29%	0.07%	0.15%	0.01%	0.78%	0.55%	0.06%	1.80%	3.34%	0.91%	2.15%	0.05%	0.33%
27:G	9.90%	0.89%	20.45%	0.84%	0.12%	58.53%	0.47%	0.13%	0.05%	0.15%	0.01%	0.38%	0.21%	0.03%	0.83%	1.23%	0.35%	5.04%	0.09%	0.33%
28:S	1.81%	1.98%	0.04%	0.00%	1.82%	0.06%	0.10%	0.05%	0.00%	0.47%	0.00%	0.04%	5.79%	0.00%	0.10%	86.00%	0.90%	0.08%	0.04%	0.71%
29:I	0.71%	0.22%	0.17%	0.03%	5.70%	0.33%	0.09%	59.74%	0.42%	7.70%	3.63%	1.15%	0.45%	0.02%	1.37%	2.18%	4.72%	11.31%	0.01%	0.06%
30:S	0.74%	2.66%	1.03%	0.15%	0.24%	6.69%	1.08%	3.28%	2.03%	0.46%	0.24%	8.65%	0.60%	0.13%	38.46%	24.96%	7.32%	0.56%	0.21%	0.50%
31:S	1.47%	4.32%	1.80%	0.27%	0.74%	4.45%	1.68%	7.98%	2.00%	0.94%	0.56%	13.56%	1.73%	0.18%	12.66%	30.02%	13.53%	0.99%	0.30%	0.83%
32:S	2.38%	3.25%	2.65%	0.33%	1.42%	6.65%	1.33%	8.36%	1.16%	1.45%	0.39%	11.38%	1.18%	0.16%	7.47%	35.33%	12.75%	1.32%	0.23%	0.82%
33:N	1.21%	0.57%	12.40%	1.84%	0.85%	1.44%	5.40%	4.94%	12.40%	1.13%	0.88%	35.85%	0.63%	1.25%	2.56%	6.34%	6.37%	1.32%	0.08%	2.55%
34:W	0.08%	6.82%	0.07%	0.15%	0.38%	3.75%	0.08%	0.01%	0.08%	1.50%	0.04%	0.05%	0.16%	0.14%	5.82%	2.14%	0.06%	0.08%	77.74%	0.86%
35:W	0.15%	2.72%	0.04%	0.40%	0.15%	3.54%	0.03%	0.02%	0.44%	1.97%	0.14%	0.02%	0.20%	0.19%	11.29%	3.18%	0.20%	0.17%	74.99%	0.15%
36:S	0.92%	2.10%	1.81%	0.09%	0.15%	5.78%	0.88%	2.11%	1.31%	0.27%	0.13%	10.93%	0.64%	0.20%	9.68%	54.84%	7.57%	0.22%	0.05%	0.32%
37:W	0.02%	3.80%	0.01%	0.02%	0.12%	1.78%	0.02%	0.00%	0.02%	0.57%	0.01%	0.01%	0.03%	0.02%	7.12%	0.72%	0.01%	0.01%	85.48%	0.22%
38:V	5.74%	0.02%	1.20%	0.08%	0.56%	2.56%	0.01%	2.45%	0.10%	1.08%	0.08%	0.05%	0.09%	0.00%	0.04%	0.10%	0.24%	85.67%	0.00%	0.01%
39:R	0.06%	3.59%	0.16%	0.00%	0.03%	2.06%	2.22%	0.01%	0.01%	0.64%	0.00%	0.07%	1.09%	0.09%	89.08%	0.59%	0.01%	0.04%	0.10%	0.14%
40:Q	0.07%	0.00%	0.06%	1.54%	0.00%	0.09%	3.31%	0.00%	1.10%	3.63%	0.05%	0.04%	4.78%	78.90%	6.19%	0.05%	0.09%	0.06%	0.03%	0.01%
41:P	15.67%	0.66%	0.10%	0.02%	0.60%	0.20%	0.48%	0.32%	0.05%	0.58%	0.01%	0.34%	38.85%	0.01%	0.37%	28.89%	12.21%	0.24%	0.03%	0.37%
42:P	0.74%	0.00%	0.00%	0.05%	0.01%	0.02%	0.19%	0.04%	0.02%	1.96%	0.00%	0.00%	91.67%	0.74%	1.23%	2.09%	1.22%	0.02%	0.00%	0.00%
43:G	1.73%	0.07%	0.70%	8.21%	0.00%	83.58%	0.02%	0.03%	0.20%	0.17%	0.11%	0.02%	0.08%	0.22%	1.91%	0.22%	0.11%	2.36%	0.26%	0.01%
44:K	0.35%	0.00%	0.09%	8.62%	0.00%	0.36%	0.07%	0.07%	73.32%	0.21%	1.06%	0.82%	0.24%	7.17%	4.62%	0.16%	2.61%	0.19%	0.03%	0.01%
45:G	0.61%	0.14%	0.32%	1.02%	0.00%	93.00%	0.01%	0.02%	0.04%	0.03%	0.03%	0.02%	0.01%	0.01%	3.23%	0.56%	0.04%	0.49%	0.41%	0.00%
46:L	0.10%	0.00%	0.00%	0.06%	0.07%	0.05%	0.07%	0.14%	0.04%	88.72%	0.57%	0.00%	4.88%	1.65%	1.81%	0.16%	0.07%	1.56%	0.04%	0.00%
47:E	0.29%	0.02%	14.61%	59.46%	0.02%	8.16%	0.44%	0.09%	4.09%	0.28%	0.28%	1.01%	0.25%	1.80%	0.49%	0.19%	0.62%	2.36%	0.04%	0.14%
48:W	0.18%	7.52%	0.08%	0.39%	0.33%	3.89%	0.08%	0.04%	0.39%	1.98%	0.14%	0.05%	0.19%	0.11%	8.87%	3.55%	0.20%	0.22%	71.25%	0.55%
49:I	0.60%	0.12%	0.10%	0.03%	2.10%	0.18%	0.07%	69.41%	0.27%	4.10%	2.51%	1.01%	0.54%	0.01%	0.40%	2.55%	11.18%	4.79%	0.00%	0.03%
50:G	0.95%	0.08%	0.67%	2.73%	0.00%	91.64%	0.01%	0.02%	0.09%	0.07%	0.03%	0.01%	0.04%	0.06%	2.03%	0.21%	0.10%	0.75%	0.51%	0.01%
51:E	2.66%	0.01%	11.19%	61.15%	0.01%	7.35%	0.51%	0.48%	5.42%	0.34%	0.06%	1.75%	0.27%	2.24%	1.91%	2.14%	1.15%	1.21%	0.00%	0.11%
52:I	0.85%	0.29%	0.33%	0.08%	7.90%	0.42%	0.16%	50.28%	0.59%	8.20%	5.94%	1.71%	0.44%	0.03%	0.78%	1.99%	5.01%	14.84%	0.03%	0.14%
53:Y	0.29%	13.65%	2.82%	0.10%	12.25%	0.39%	8.01%	0.39%	0.19%	2.03%	0.01%	3.98%	0.85%	0.28%	1.24%	14.01%	0.43%	0.23%	0.30%	38.57%
54:H	0.46%	0.49%	2.15%	0.50%	0.59%	0.31%	62.38%	0.18%	0.34%	4.51%	0.02%	1.48%	5.44%	9.77%	7.94%	0.88%	0.36%	0.35%	0.03%	1.82%
55:S	0.84%	5.50%	1.11%	0.11%	0.68%	11.48%	0.54%	3.86%	0.54%	0.55%	0.09%	4.42%	0.41%	0.05%	10.27%	54.21%	4.11%	0.59%	0.27%	0.37%
56:G	2.51%	0.09%	1.06%	8.08%	0.01%	79.48%	0.03%	0.03%	0.27%	0.20%	0.09%	0.03%	0.08%	0.24%	3.83%	0.15%	0.15%	2.12%	1.54%	0.02%
57:S	0.43%	1.00%	0.97%	0.30%	0.11%	4.52%	0.37%	3.97%	3.27%	0.24%	0.35%	6.30%	0.20%	0.13%	39.02%	32.23%	4.25%	2.13%	0.08%	0.13%
58:T	8.25%	0.20%	0.42%	0.04%	0.46%	0.50%	0.21%	7.37%	0.40%	0.52%	0.25%	2.96%	3.72%	0.02%	1.52%	9.10%	62.83%	1.12%	0.01%	0.11%
59:N	0.59%	0.49%	3.82%	0.65%	0.33%	0.58%	3.65%	3.20%	10.96%	0.36%	0.33%	51.95%	0.47%	0.62%	2.64%	8.00%	8.63%	0.34%	0.02%	2.38%
60:Y	0.26%	11.11%	3.54%	0.09%	4.63%	0.66%	8.35%	0.22%	0.53%	1.82%	0.01%	3.83%	0.62%	0.34%	0.95%	9.95%	0.43%	0.16%	0.46%	52.03%
61:N	0.46%	0.53%	5.51%	0.79%	0.28%	0.68%	3.77%	2.76%	14.00%	0.30%	0.35%	52.94%	0.35%	0.47%	2.77%	6.13%	5.21%	0.24%	0.03%	2.43%
62:P	3.23%	0.01%	0.01%	0.11%	0.01%	0.07%	0.06%	0.01%	0.07%	1.79%	0.14%	0.01%	82.59%	0.62%	0.55%	6.73%	3.52%	0.35%	0.12%	0.00%
63:S	3.52%	2.80%	0.08%	0.01%	2.54%	0.10%	0.20%	0.09%	0.01%	0.52%	0.01%	0.09%	6.44%	0.00%	0.13%	79.93%	2.01%	0.11%	0.09%	1.33%
64:L	0.18%	0.10%	0.05%	0.00%																