

	A	C	D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	V	W	Y
1:Q	0.39%	0.01%	0.38%	4.89%	0.01%	0.38%	4.12%	0.05%	4.89%	5.43%	0.34%	0.35%	5.27%	66.51%	5.64%	0.23%	0.38%	0.39%	0.18%	0.16%
2:V	4.60%	0.02%	0.17%	3.43%	0.29%	3.08%	0.01%	2.51%	0.48%	7.67%	6.21%	0.03%	0.23%	0.11%	0.42%	0.20%	0.74%	69.77%	0.04%	0.00%
3:Q	0.08%	0.05%	0.26%	1.22%	0.03%	0.12%	10.96%	0.09%	5.15%	2.89%	0.11%	0.96%	2.18%	70.43%	4.46%	0.18%	0.27%	0.11%	0.29%	0.15%
4:L	0.71%	0.06%	0.03%	0.51%	2.57%	0.39%	0.16%	2.05%	0.80%	65.85%	4.24%	0.07%	3.30%	1.83%	1.98%	1.22%	0.68%	13.11%	0.42%	0.02%
5:Q	0.06%	0.02%	0.09%	1.08%	0.01%	0.15%	3.61%	0.02%	3.94%	2.37%	0.06%	0.23%	1.62%	80.88%	4.94%	0.12%	0.13%	0.09%	0.53%	0.06%
6:E	5.61%	0.00%	3.53%	77.62%	0.00%	7.63%	0.05%	0.02%	1.66%	0.15%	0.16%	0.13%	0.08%	0.63%	0.19%	0.05%	0.21%	2.24%	0.02%	0.01%
7:S	3.07%	0.02%	0.00%	0.02%	0.02%	0.06%	0.00%	0.00%	0.01%	3.86%	0.08%	0.00%	4.43%	0.01%	0.13%	84.37%	1.71%	0.12%	2.10%	0.00%
8:G	1.11%	0.57%	2.30%	0.07%	0.01%	91.99%	0.03%	0.04%	0.01%	0.01%	0.00%	0.11%	0.03%	0.00%	0.92%	1.92%	0.09%	0.76%	0.02%	0.02%
9:P	0.57%	0.00%	0.00%	0.03%	0.00%	0.01%	0.15%	0.03%	0.01%	1.65%	0.00%	0.00%	93.56%	0.67%	1.04%	1.39%	0.85%	0.03%	0.00%	0.00%
10:G	0.76%	0.03%	0.30%	2.82%	0.00%	85.83%	0.01%	0.08%	0.11%	0.10%	0.00%	0.01%	0.07%	0.05%	9.13%	0.16%	0.12%	0.41%	0.01%	0.00%
11:L	0.07%	0.00%	0.00%	0.04%	0.08%	0.04%	0.07%	0.09%	0.02%	90.15%	0.44%	0.00%	3.29%	1.30%	2.86%	0.12%	0.05%	1.33%	0.05%	0.00%
12:V	5.24%	0.00%	0.22%	4.38%	0.07%	4.74%	0.01%	0.98%	0.35%	7.66%	7.36%	0.02%	0.22%	0.10%	0.34%	0.20%	0.65%	67.39%	0.09%	0.00%
13:K	0.25%	0.00%	0.20%	4.83%	0.00%	0.63%	0.07%	0.34%	66.62%	0.25%	5.21%	1.04%	0.13%	3.56%	11.77%	0.23%	4.48%	0.26%	0.12%	0.01%
14:P	3.77%	0.18%	0.07%	0.00%	0.26%	0.07%	0.66%	0.14%	0.01%	1.34%	0.00%	0.20%	77.88%	0.03%	0.57%	9.85%	4.70%	0.18%	0.01%	0.08%
15:S	2.53%	0.28%	0.01%	0.13%	0.24%	0.30%	0.01%	0.01%	0.03%	13.86%	0.12%	0.00%	2.99%	0.02%	0.47%	69.20%	0.70%	0.56%	8.48%	0.05%
16:E	3.86%	0.00%	1.74%	80.01%	0.00%	5.30%	0.05%	0.01%	4.13%	0.10%	0.24%	0.10%	0.12%	1.99%	0.48%	0.06%	0.34%	1.41%	0.02%	0.02%
17:T	8.15%	0.05%	0.07%	0.02%	0.06%	0.13%	0.04%	2.63%	0.28%	0.07%	0.20%	1.97%	3.08%	0.00%	0.21%	4.35%	78.50%	0.16%	0.00%	0.03%
18:L	0.07%	0.00%	0.00%	0.07%	0.08%	0.03%	0.20%	0.05%	0.04%	85.39%	0.78%	0.00%	5.68%	3.29%	2.58%	0.09%	0.08%	1.56%	0.03%	0.00%
19:S	3.17%	2.44%	0.07%	0.01%	2.24%	0.07%	0.13%	0.07%	0.01%	0.38%	0.00%	0.10%	5.41%	0.00%	0.09%	82.80%	1.63%	0.08%	0.07%	1.21%
20:L	0.13%	0.09%	0.04%	0.00%	3.68%	0.06%	1.00%	0.90%	0.00%	83.43%	0.02%	0.01%	5.28%	0.07%	1.52%	0.12%	0.05%	3.58%	0.00%	0.02%
21:T	6.24%	0.11%	0.12%	0.01%	0.22%	0.21%	0.08%	4.50%	0.23%	0.33%	0.43%	1.32%	4.57%	0.01%	0.50%	6.15%	74.29%	0.61%	0.01%	0.06%
22:C	0.16%	69.69%	0.51%	0.03%	3.06%	2.08%	1.05%	0.04%	0.03%	0.45%	0.00%	0.52%	0.35%	0.02%	2.32%	7.18%	0.10%	0.09%	2.28%	10.05%
23:T	6.09%	0.44%	0.24%	0.03%	0.29%	0.61%	0.14%	4.21%	0.12%	0.33%	0.09%	2.09%	9.63%	0.01%	0.52%	11.69%	62.68%	0.69%	0.01%	0.08%
24:V	5.03%	0.02%	1.67%	0.09%	0.67%	2.33%	0.02%	1.21%	0.00%	1.57%	0.12%	0.02%	0.06%	0.00%	0.03%	0.07%	0.10%	86.99%	0.00%	0.01%
25:S	1.57%	3.03%	0.06%	0.00%	2.47%	0.13%	0.07%	0.06%	0.00%	0.34%	0.00%	0.04%	3.56%	0.01%	0.12%	86.48%	1.07%	0.14%	0.08%	0.78%
26:G	4.74%	1.14%	7.54%	0.62%	0.09%	76.53%	0.49%	0.23%	0.04%	0.11%	0.00%	0.63%	0.42%	0.04%	1.54%	2.96%	0.71%	1.88%	0.03%	0.25%
27:G	8.93%	0.83%	18.56%	0.63%	0.08%	63.03%	0.37%	0.09%	0.03%	0.12%	0.00%	0.29%	0.15%	0.02%	0.70%	1.13%	0.27%	4.43%	0.06%	0.27%
28:S	1.55%	1.73%	0.03%	0.00%	1.58%	0.05%	0.07%	0.04%	0.00%	0.33%	0.00%	0.03%	5.00%	0.00%	0.07%	88.06%	0.78%	0.06%	0.03%	0.59%
29:I	0.54%	0.16%	0.12%	0.02%	5.12%	0.24%	0.06%	64.80%	0.31%	6.72%	3.19%	1.02%	0.33%	0.02%	1.04%	1.99%	4.18%	10.09%	0.01%	0.05%
30:S	1.01%	2.24%	1.16%	0.14%	0.40%	3.43%	1.17%	7.77%	1.88%	0.57%	0.51%	15.20%	1.08%	0.11%	12.20%	35.09%	14.79%	0.64%	0.16%	0.45%
31:S	1.14%	4.14%	1.67%	0.11%	0.46%	8.10%	0.84%	2.80%	0.40%	0.39%	0.06%	9.95%	0.58%	0.05%	5.58%	54.76%	7.88%	0.40%	0.16%	0.54%
32:Y	0.32%	10.58%	5.73%	0.26%	7.25%	0.46%	11.26%	0.19%	0.27%	1.71%	0.01%	3.05%	0.57%	0.37%	0.81%	6.43%	0.20%	0.24%	0.32%	49.98%
33:Y	0.17%	10.89%	3.12%	0.04%	7.62%	0.51%	7.63%	0.16%	0.46%	1.58%	0.02%	3.47%	0.44%	0.51%	0.68%	7.84%	0.30%	0.13%	0.39%	54.05%
34:W	0.04%	2.49%	0.01%	0.10%	0.11%	2.93%	0.02%	0.00%	0.05%	1.46%	0.03%	0.01%	0.10%	0.12%	4.56%	1.28%	0.03%	0.04%	86.43%	0.19%
35:S	0.87%	0.81%	1.22%	0.18%	0.07%	4.26%	0.44%	4.83%	4.06%	0.20%	0.62%	18.96%	0.39%	0.14%	16.13%	33.30%	12.89%	0.37%	0.08%	0.16%
36:W	0.04%	6.86%	0.03%	0.07%	0.23%	2.33%	0.08%	0.01%	0.06%	1.57%	0.03%	0.03%	0.16%	0.13%	5.83%	1.77%	0.04%	0.04%	80.11%	0.57%
37:I	0.48%	0.05%	0.07%	0.02%	1.47%	0.19%	0.03%	72.63%	0.39%	3.74%	2.96%	1.01%	0.27%	0.02%	0.60%	2.13%	7.54%	6.38%	0.00%	0.01%
38:R	0.02%	0.33%	0.01%	0.02%	0.00%	1.10%	0.17%	0.00%	0.01%	0.52%	0.01%	0.00%	0.85%	1.20%	93.31%	0.10%	0.02%	0.01%	2.30%	0.01%
39:Q	0.04%	0.00%	0.06%	1.38%	0.00%	0.07%	2.48%	0.01%	1.35%	3.36%	0.05%	0.25%	2.29%	84.02%	4.44%	0.04%	0.05%	0.04%	0.06%	0.01%
40:P	14.62%	0.50%	0.08%	0.01%	0.48%	0.14%	0.43%	0.25%	0.03%	0.50%	0.01%	0.29%	42.29%	0.01%	0.32%	27.84%	11.71%	0.18%	0.02%	0.29%
41:P	0.65%	0.00%	0.00%	0.04%	0.00%	0.01%	0.14%	0.03%	0.01%	1.69%	0.00%	0.00%	92.86%	0.66%	1.04%	1.78%	1.06%	0.02%	0.00%	0.00%
42:G	1.53%	0.05%	0.54%	7.33%	0.00%	85.78%	0.01%	0.02%	0.16%	0.12%	0.08%	0.01%	0.06%	0.16%	1.59%	0.17%	0.08%	2.07%	0.24%	0.00%
43:K	0.26%	0.00%	0.07%	7.59%	0.00%	0.28%	0.06%	0.06%	76.22%	0.16%	1.12%	0.84%	0.17%	6.28%	4.24%	0.12%	2.34%	0.15%	0.03%	0.01%
44:G	0.94%	0.03%	0.26%	2.74%	0.00%	85.25%	0.00%	0.06%	0.16%	0.05%	0.01%	0.02%	0.03%	0.04%	9.79%	0.20%	0.09%	0.30%	0.02%	0.00%
45:L	0.07%	0.00%	0.00%	0.04%	0.05%	0.04%	0.05%	0.10%	0.02%	90.29%	0.42%	0.00%	3.28%	1.27%	2.83%	0.12%	0.06%	1.31%	0.04%	0.00%
46:E	5.11%	0.01%	13.34%	63.86%	0.01%	7.24%	0.34%	0.06%	3.74%	0.22%	0.22%	0.80%	0.21%	1.62%	0.38%	0.12%	0.45%	2.13%	0.02%	0.11%
47:W	0.13%	6.81%	0.06%	0.30%	0.26%	3.37%	0.05%	0.02%	0.30%	1.71%	0.11%	0.03%	0.14%	0.08%	7.87%	3.04%	0.14%	0.17%	74.97%	0.43%
48:I	0.44%	0.08%	0.07%	0.02%	1.83%	0.13%	0.05%	73.70%	0.22%	3.43%	2.27%	0.92%	0.38%	0.01%	0.28%	2.10%	9.81%	4.25%	0.00%	0.02%
49:G	3.25%	0.17%	3.76%	6.20%	0.02%	81.00%	0.05%	0.08%	0.19%	0.18%	0.05%	0.07%	0.12%	0.13%	1.59%	0.46%	0.26%	2.11%	0.30%	0.02%
50:Y	0.38%	8.15%	4.33%	0.38%	9.81%	0.34%	9.97%	0.77%	0.42%	2.12%	0.03%	5.89%	0.87%	0.63%	0.98%	11.28%	0.77%	0.45%	0.26%	42.20%
51:I	0.70%	0.29%	0.21%	0.05%	10.90%	0.33%	0.12%	48.05%	0.24%	14.57%	4.88%	0.86%	0.46%	0.02%	0.51%	1.71%	3.13%	12.86%	0.03%	0.09%
52:Y	0.25%	11.03%	2.55%	0.12%	11.83%	0.26%	7.60%	0.21%	0.14%	1.51%	0.00%	3.77%	0.69%	0.47%	0.76%	13.04%	0.45%	0.15%	0.29%	44.85%
53:Y	0.30%	11.36%	6.27%	0.12%	8.10%	0.51%	10.14%	0.18%	0.26%	1.28%	0.01%	3.72%	0.30%	0.53%	0.83%	7.19%	0.16%	0.26%	0.13%	48.35%
54:S	0.35%	4.80%	0.47%	0.04%	0.23%	5.85%	0.50%	2.06%	0.48%	0.16%	0.05%	4.87%	0.29%	0.04%	9.37%	64.14%	5.68%	0.20%	0.12%	0.29%
55:G	2.12%	0.06%	0.80%	7.26%	0.01%	82.18%	0.02%	0.02%	0.22%	0.14%	0.07%	0.02%	0.06%	0.18%	3.39%	0.11%	0.11%	1.87%	1.36%	0.01%
56:S	0.31%	0.93%	0.81%	0.20%	0.08%	4.06%	0.28%	3.54%	2.70%	0.16%	0.26%	5.94%	0.14%	0.09%	37.14%	37.78%	3.61%	1.82%	0.05%	0.09%
57:T	7.30%	0.15%	0.29%	0.03%	0.34%	0.34%	0.15%	6.54%	0.31%	0.37%	0.19%	2.58%	3.14%	0.01%	1.15%	8.08%	68.12%	0.81%	0.01%	0.08%
58:N	0.45%	0.38%	3.40%	0.51%	0.25%	0.45%	3.23%	2.84%	10.31%	0.26%	0.25%	57.26%	0.35%	0.49%	2.08%	7.40%	7.59%	0.25%	0.02%	2.24%
59:Y	0.18%	10.18%	3.07%	0.06%	4.10%	0.52%	7.63%	0.16%	0.42%	1.42%	0.01%	3.58%	0.46%	0.26%	0.70%	8.80%	0.34%	0.10%	0.37%	57.64%
60:N	0.33%	0.41%	4.88%	0.62%	0.21%	0.49%	3.30%	2.36%	13.28%	0.21%	0.26%	58.46%	0.27%	0.37%	2.11%	5.54%	4.46%	0.17%	0.02%	2.25%
61:P	3.31%	0.13%	0.06%	0.00%	0.19%	0.06%	1.11%	0.13%	0.01%	1.77%	0.01%	0.08%	82.52%	0.04%	0.72%	6.34%	3.25%	0.17%	0.01%	0.10%
62:S	2.06%	2.76%	0.11%	0.00%	2.44%	0.10%	0.12%	0.02%	0.00%	0.45%	0.00%	0.06%	6.14%	0.00%	0.06%	83.23%	0.96%	0.16%	0.07%	1.25%
63:L	0.13%	0.08%	0.04%	0.00%	2.97%	0.06%	0.99%	0.87%	0.00%	84.16%	0.03%	0.01%	5.29%	0.10%	1.50%	0.13%	0.05%	3.54%	0.00%	0.02%
64:K	0.42%	0.01%	0.17%																	