

	A	C	D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	V	W	Y
1:Q	0.37%	0.02%	0.35%	4.82%	0.01%	0.37%	6.78%	0.03%	4.89%	5.32%	0.34%	0.29%	5.20%	64.25%	5.56%	0.22%	0.37%	0.37%	0.18%	0.25%
2:S	1.72%	2.25%	0.03%	0.00%	2.18%	0.05%	0.05%	0.06%	0.00%	0.24%	0.00%	0.03%	4.06%	0.00%	0.08%	87.00%	1.47%	0.06%	0.05%	0.65%
3:V	4.21%	0.01%	0.39%	2.81%	0.42%	2.91%	0.02%	1.26%	0.13%	11.46%	4.26%	0.01%	0.67%	0.16%	0.29%	0.24%	0.54%	70.12%	0.07%	0.01%
4:L	0.24%	0.00%	0.00%	0.15%	0.12%	0.18%	0.01%	0.09%	0.09%	86.15%	2.78%	0.00%	1.87%	1.03%	0.84%	0.56%	0.16%	5.36%	0.34%	0.00%
5:T	6.75%	0.07%	0.06%	0.01%	0.07%	0.19%	0.04%	2.90%	0.09%	0.11%	0.07%	0.95%	4.48%	0.00%	0.23%	5.29%	78.45%	0.23%	0.00%	0.01%
6:Q	0.14%	0.01%	0.10%	2.86%	0.00%	0.22%	2.11%	0.00%	0.87%	4.51%	0.06%	0.02%	5.31%	75.50%	7.90%	0.07%	0.07%	0.11%	0.12%	0.02%
7:P	6.16%	0.02%	0.05%	1.09%	0.03%	0.10%	0.05%	0.10%	0.43%	0.82%	0.01%	0.03%	68.55%	0.83%	0.55%	14.97%	6.07%	0.10%	0.01%	0.01%
8:P	1.09%	0.14%	0.05%	0.01%	0.16%	0.06%	1.77%	0.11%	0.01%	2.58%	0.01%	0.09%	88.61%	0.06%	1.37%	2.10%	1.58%	0.11%	0.01%	0.11%
9:S	1.51%	0.15%	0.01%	0.08%	0.23%	0.03%	0.01%	0.04%	0.01%	2.10%	0.00%	0.00%	5.20%	0.02%	0.06%	89.36%	1.01%	0.04%	0.10%	0.05%
10:A	48.04%	0.00%	0.38%	9.85%	0.02%	5.57%	0.01%	0.13%	0.42%	1.55%	1.33%	0.01%	3.39%	0.23%	0.22%	1.49%	4.17%	23.15%	0.04%	0.00%
11:S	2.19%	1.85%	0.03%	0.00%	1.93%	0.05%	0.06%	0.05%	0.00%	0.28%	0.00%	0.03%	4.98%	0.00%	0.08%	86.21%	1.60%	0.06%	0.06%	0.55%
12:G	1.78%	0.01%	0.21%	7.50%	0.00%	84.73%	0.01%	0.01%	0.21%	0.14%	0.09%	0.01%	0.07%	0.19%	2.40%	0.06%	0.16%	1.75%	0.69%	0.00%
13:T	6.59%	0.04%	0.08%	0.02%	0.06%	0.15%	0.06%	2.70%	0.32%	0.09%	0.08%	1.96%	3.60%	0.01%	0.46%	3.36%	80.22%	0.18%	0.00%	0.02%
14:P	0.48%	0.02%	0.01%	0.00%	0.05%	0.01%	1.17%	0.03%	0.00%	1.89%	0.00%	0.01%	93.59%	0.02%	0.89%	0.98%	0.78%	0.06%	0.00%	0.01%
15:G	1.04%	1.00%	0.96%	1.34%	0.01%	88.30%	0.04%	0.05%	0.04%	0.05%	0.01%	0.08%	0.06%	0.04%	3.64%	2.52%	0.18%	0.52%	0.11%	0.01%
16:Q	0.04%	0.00%	0.06%	1.01%	0.00%	0.07%	4.00%	0.01%	1.08%	3.12%	0.05%	0.21%	2.89%	81.59%	5.57%	0.05%	0.05%	0.04%	0.10%	0.03%
17:R	0.06%	0.08%	0.01%	0.16%	0.00%	8.36%	0.01%	0.18%	1.21%	0.05%	0.30%	0.19%	0.03%	0.05%	83.08%	3.17%	0.61%	0.04%	2.39%	0.00%
18:V	4.90%	0.01%	1.46%	0.13%	0.53%	1.48%	0.01%	2.34%	0.01%	1.05%	0.08%	0.04%	0.06%	0.00%	0.05%	0.09%	0.14%	87.61%	0.00%	0.01%
19:T	6.38%	0.09%	0.10%	0.01%	0.18%	0.18%	0.07%	3.93%	0.09%	0.26%	0.09%	1.23%	4.56%	0.00%	0.70%	5.80%	75.81%	0.49%	0.00%	0.04%
20:I	0.51%	0.13%	0.13%	0.02%	5.00%	0.20%	0.07%	62.31%	0.43%	6.42%	5.30%	1.70%	0.37%	0.02%	0.43%	1.89%	5.14%	9.85%	0.01%	0.06%
21:S	1.80%	2.59%	0.03%	0.00%	2.20%	0.05%	0.05%	0.04%	0.00%	0.26%	0.00%	0.03%	3.77%	0.01%	0.09%	87.18%	1.11%	0.06%	0.05%	0.67%
22:C	0.24%	64.77%	0.44%	0.01%	6.61%	1.02%	0.81%	0.06%	0.01%	0.68%	0.00%	0.35%	0.37%	0.02%	1.75%	11.61%	0.13%	0.14%	3.17%	7.78%
23:S	3.09%	10.41%	0.13%	0.01%	8.92%	0.27%	0.24%	0.14%	0.00%	1.11%	0.00%	0.10%	3.23%	0.01%	0.33%	68.33%	0.73%	0.29%	0.30%	2.36%
24:G	2.05%	0.03%	0.94%	5.47%	0.00%	83.86%	0.02%	0.12%	0.18%	0.14%	0.01%	0.03%	0.13%	0.10%	5.37%	0.17%	0.25%	1.07%	0.03%	0.01%
25:S	0.52%	2.63%	1.38%	0.19%	0.39%	9.95%	1.19%	3.92%	1.56%	0.41%	0.18%	10.23%	0.39%	0.12%	34.45%	26.05%	5.08%	0.62%	0.08%	0.68%
26:S	0.70%	2.01%	1.45%	0.12%	0.24%	4.03%	0.85%	3.85%	2.10%	0.23%	0.29%	13.49%	0.33%	0.06%	12.43%	48.77%	7.97%	0.39%	0.21%	0.50%
27:S	1.71%	2.01%	0.04%	0.00%	1.74%	0.05%	0.09%	0.05%	0.00%	0.61%	0.00%	0.04%	4.89%	0.00%	0.08%	86.95%	0.76%	0.07%	0.10%	0.80%
28:N	0.62%	0.44%	3.06%	0.32%	0.22%	0.60%	2.94%	3.46%	6.01%	0.26%	0.12%	53.12%	0.44%	0.32%	5.31%	10.01%	10.29%	0.28%	0.01%	2.17%
29:I	0.33%	0.20%	0.10%	0.01%	4.16%	0.31%	0.04%	72.99%	0.13%	4.03%	1.78%	0.96%	0.17%	0.00%	0.73%	4.85%	2.59%	6.55%	0.01%	0.04%
30:G	2.81%	0.02%	0.86%	5.68%	0.00%	85.36%	0.04%	0.13%	0.10%	0.17%	0.01%	0.02%	0.08%	0.26%	3.20%	0.10%	0.10%	1.03%	0.01%	0.00%
31:S	0.98%	3.26%	1.80%	0.17%	0.57%	4.58%	1.57%	7.77%	1.09%	0.84%	0.32%	12.56%	1.24%	0.15%	8.06%	42.26%	11.07%	0.89%	0.11%	0.73%
32:N	1.01%	0.68%	10.72%	0.80%	0.83%	1.28%	5.68%	4.93%	2.86%	0.74%	0.13%	46.01%	0.57%	0.45%	1.04%	11.14%	7.80%	0.64%	0.02%	2.68%
33:Y	0.36%	10.31%	4.98%	0.65%	11.86%	0.44%	10.08%	0.25%	0.21%	1.24%	0.01%	3.73%	0.62%	0.59%	0.93%	11.09%	0.34%	0.24%	0.18%	41.88%
34:V	6.08%	0.04%	1.00%	4.98%	2.31%	4.06%	0.08%	9.97%	0.58%	21.23%	0.87%	0.10%	1.60%	0.55%	0.89%	1.26%	1.97%	42.39%	0.01%	0.02%
35:Y	0.15%	10.22%	4.63%	0.10%	7.04%	0.30%	10.86%	0.23%	0.68%	1.47%	0.03%	5.40%	0.49%	0.73%	0.88%	6.14%	0.29%	0.17%	0.33%	49.85%
36:W	0.08%	14.52%	0.10%	0.08%	0.70%	2.86%	0.14%	0.01%	0.04%	1.02%	0.01%	0.07%	0.12%	0.09%	4.36%	2.37%	0.04%	0.05%	71.52%	1.79%
37:Y	0.28%	10.62%	8.18%	0.37%	5.02%	0.62%	8.95%	0.87%	1.62%	1.19%	0.03%	12.37%	0.34%	0.26%	0.96%	5.80%	0.50%	0.28%	0.19%	41.54%
38:Q	0.12%	0.02%	0.18%	2.40%	0.03%	0.14%	9.05%	0.03%	1.77%	2.84%	0.06%	0.21%	3.79%	73.76%	4.95%	0.12%	0.15%	0.15%	0.05%	0.18%
39:Q	0.23%	0.08%	1.23%	5.96%	0.06%	0.46%	6.83%	0.39%	25.69%	1.84%	0.92%	3.75%	1.47%	43.17%	5.22%	0.59%	1.22%	0.23%	0.25%	0.40%
40:L	0.63%	0.31%	0.09%	0.02%	9.77%	0.16%	0.53%	3.72%	0.03%	68.57%	0.18%	0.13%	3.29%	0.07%	1.29%	1.02%	0.47%	9.61%	0.02%	0.08%
41:P	2.13%	0.01%	0.00%	0.13%	0.01%	0.04%	0.13%	0.10%	0.04%	1.57%	0.01%	0.00%	86.77%	0.61%	1.05%	4.63%	2.62%	0.13%	0.00%	0.00%
42:G	1.50%	0.01%	0.53%	5.56%	0.00%	81.64%	0.02%	0.18%	0.20%	0.20%	0.02%	0.02%	0.15%	0.10%	8.62%	0.17%	0.22%	0.83%	0.01%	0.00%
43:T	7.78%	0.00%	0.02%	0.97%	0.01%	0.48%	0.00%	0.30%	6.82%	1.53%	10.67%	0.07%	6.22%	0.37%	4.96%	3.91%	52.88%	2.90%	0.09%	0.00%
44:A	84.09%	0.03%	0.44%	0.14%	0.03%	1.41%	0.02%	0.13%	0.02%	0.04%	0.00%	0.09%	3.28%	0.00%	0.03%	1.75%	7.08%	1.42%	0.00%	0.02%
45:P	0.36%	0.01%	0.01%	0.00%	0.04%	0.01%	1.06%	0.03%	0.00%	1.68%	0.00%	0.01%	94.61%	0.04%	0.65%	0.75%	0.69%	0.04%	0.00%	0.01%
46:K	0.48%	0.01%	0.52%	4.33%	0.03%	0.28%	0.54%	6.15%	54.29%	0.57%	0.62%	6.44%	0.48%	4.94%	10.13%	0.84%	8.93%	0.31%	0.00%	0.10%
47:L	0.55%	0.31%	0.20%	0.01%	12.58%	0.32%	0.98%	3.69%	0.02%	64.28%	0.32%	0.09%	2.60%	0.08%	0.61%	0.64%	0.25%	12.34%	0.02%	0.12%
48:L	0.22%	0.12%	0.06%	0.01%	4.45%	0.09%	0.90%	1.40%	0.00%	81.17%	0.05%	0.03%	4.95%	0.07%	1.44%	0.22%	0.07%	4.68%	0.00%	0.06%
49:I	0.54%	0.13%	0.15%	0.04%	4.21%	0.24%	0.10%	59.05%	0.47%	8.10%	6.37%	1.63%	0.40%	0.02%	0.63%	1.78%	5.34%	10.72%	0.01%	0.05%
50:Y	0.23%	10.49%	2.51%	0.17%	11.78%	0.24%	7.44%	0.28%	0.31%	2.12%	0.01%	3.55%	0.68%	0.54%	0.72%	13.68%	0.43%	0.18%	0.38%	44.28%
51:R	0.50%	0.20%	0.08%	0.87%	0.02%	13.36%	0.02%	0.27%	3.88%	0.31%	0.96%	0.29%	0.22%	0.20%	66.56%	1.92%	3.84%	0.27%	6.21%	0.02%
52:N	0.60%	0.26%	5.40%	0.77%	0.25%	0.65%	4.33%	8.52%	6.82%	0.41%	0.45%	45.33%	0.40%	0.70%	1.87%	9.68%	11.76%	0.40%	0.01%	1.37%
53:N	0.83%	0.76%	8.36%	0.56%	0.79%	1.49%	5.01%	5.89%	3.61%	0.75%	0.18%	45.97%	0.57%	0.27%	1.46%	13.55%	6.96%	0.70%	0.02%	2.29%
54:Q	0.21%	0.02%	0.27%	3.58%	0.02%	0.29%	5.02%	0.03%	2.90%	4.08%	0.14%	0.20%	4.93%	69.72%	7.64%	0.15%	0.17%	0.32%	0.19%	0.09%
55:R	0.09%	0.54%	0.01%	0.11%	0.01%	5.40%	0.11%	0.01%	0.48%	0.89%	0.08%	0.02%	1.00%	1.58%	68.89%	0.47%	0.11%	0.09%	20.11%	0.01%
56:P	1.62%	0.01%	0.02%	0.00%	0.02%	0.01%	0.98%	0.02%	0.01%	0.64%	0.00%	0.16%	93.66%	0.05%	0.31%	1.77%	0.67%	0.02%	0.00%	0.02%
57:S	1.49%	0.11%	0.00%	0.08%	0.21%	0.02%	0.01%	0.04%	0.01%	2.09%	0.00%	0.00%	5.25%	0.02%	0.07%	89.44%	1.02%	0.03%	0.06%	0.05%
58:G	0.42%	0.03%	0.18%	1.66%	0.00%	95.18%	0.00%	0.01%	0.04%	0.02%	0.01%	0.01%	0.01%	0.04%	1.56%	0.08%	0.02%	0.46%	0.25%	0.00%
59:V	4.87%	0.01%	1.03%	0.18%	0.50%	2.26%	0.01%	2.42%	0.03%	1.24%	0.15%	0.03%	0.08%	0.01%	0.04%	0.10%	0.20%	86.84%	0.00%	0.00%
60:P	0.97%	0.12%	0.03%	0.00%	0.12%	0.06%	0.75%	0.10%	0.00%	1.88%	0.00%	0.04%	88.82%	0.08%	1.39%	3.67%	1.82%	0.12%	0.00%	0.04%
61:D	3.48%	0.06%	82.06%	3.27%	0.03%	7.17%	0.53%	0.05%	0.12%	0.03%	0.00%	0.84%	0.04%	0.07%	0.07%	0.14%	0.07%	1.59%	0.00%	0.37%
62:R	0.21%	0.11%	0.02%	0.25%	0.02%	1.84%	1.42%	0.05%	0.10%	2.10%	0.00%	0.03%	7.67%	5.99%	79.53%	0.27%	0.17%	0.11%	0.09%	0.03%
63:F	0.11%	2.44%	0.08%	0.01%	64.07%	0.11%	0.19%	1.42%	0.01%	23.56%	0.11%	0.10%	0.66%	0.01%	0.33%	3.03%	0.08%	2.60%	0.29%	0.79%
64:S	1.61%	3.26%	0.0																	