

	A	C	D	E	F	G	H	I	K	L	M	N	Q	R	S	T	V	W	Y	
1:S	5.07%	4.54%	0.34%	0.03%	4.28%	0.37%	0.35%	0.35%	0.04%	1.23%	0.03%	0.34%	5.05%	0.02%	0.44%	67.03%	5.05%	0.37%	0.44%	4.62%
2:Y	0.19%	10.03%	2.56%	0.14%	10.44%	0.27%	9.37%	0.25%	0.13%	2.24%	0.00%	3.37%	0.83%	0.84%	0.89%	12.27%	0.42%	0.18%	0.19%	45.39%
3:E	3.96%	0.02%	16.54%	63.00%	0.02%	6.71%	0.54%	0.09%	2.91%	0.21%	0.11%	0.60%	0.24%	2.39%	0.43%	0.16%	0.42%	1.42%	0.02%	0.19%
4:L	0.61%	0.01%	0.01%	0.44%	0.26%	0.46%	0.01%	0.22%	0.32%	72.69%	6.11%	0.00%	1.57%	0.78%	0.98%	1.38%	0.38%	13.03%	0.75%	0.00%
5:T	4.88%	0.00%	0.05%	1.07%	0.00%	0.12%	0.01%	1.61%	5.59%	0.11%	0.17%	0.37%	3.53%	0.14%	1.86%	1.63%	78.74%	0.11%	0.00%	0.00%
6:Q	0.13%	0.01%	0.22%	6.10%	0.01%	0.20%	2.10%	0.01%	1.71%	4.19%	0.14%	0.04%	2.60%	75.25%	6.81%	0.08%	0.08%	0.21%	0.08%	0.04%
7:P	6.40%	0.02%	0.06%	1.13%	0.04%	0.10%	0.05%	0.11%	0.45%	0.84%	0.01%	0.04%	67.49%	0.83%	0.55%	15.46%	6.28%	0.11%	0.01%	0.01%
8:P	1.10%	0.14%	0.05%	0.01%	0.16%	0.05%	1.83%	0.11%	0.01%	2.62%	0.01%	0.08%	88.41%	0.06%	1.39%	2.14%	1.60%	0.12%	0.01%	0.10%
9:S	1.46%	0.10%	0.00%	0.03%	0.09%	0.17%	0.00%	0.00%	0.01%	2.59%	0.02%	0.00%	4.25%	0.02%	0.08%	88.27%	0.75%	0.09%	2.03%	0.02%
10:V	3.86%	0.00%	0.15%	3.11%	0.08%	2.16%	0.01%	0.66%	0.89%	8.01%	6.82%	0.02%	0.23%	0.12%	0.58%	0.12%	1.27%	71.89%	0.04%	0.00%
11:S	2.65%	0.08%	0.00%	0.04%	0.12%	0.03%	0.00%	0.04%	0.01%	1.32%	0.00%	0.00%	5.61%	0.03%	0.06%	88.08%	1.75%	0.06%	0.07%	0.03%
12:V	3.21%	0.00%	0.13%	3.32%	0.12%	2.67%	0.01%	0.63%	0.25%	8.63%	5.26%	0.01%	0.23%	0.12%	0.23%	0.12%	0.47%	74.53%	0.05%	0.00%
13:S	3.13%	2.52%	0.07%	0.00%	2.28%	0.07%	0.13%	0.07%	0.01%	0.42%	0.00%	0.10%	5.41%	0.00%	0.10%	82.64%	1.60%	0.09%	0.11%	1.23%
14:P	0.68%	0.00%	0.00%	0.04%	0.00%	0.01%	0.14%	0.03%	0.01%	1.69%	0.00%	0.00%	92.77%	0.64%	1.04%	1.83%	1.07%	0.02%	0.00%	0.00%
15:G	0.74%	0.04%	0.20%	2.85%	0.00%	85.74%	0.01%	0.09%	0.11%	0.09%	0.01%	0.01%	0.08%	0.05%	9.11%	0.34%	0.13%	0.39%	0.01%	0.00%
16:Q	0.05%	0.00%	0.02%	0.95%	0.00%	0.07%	0.83%	0.00%	0.73%	3.42%	0.03%	0.03%	2.59%	85.13%	5.94%	0.06%	0.04%	0.04%	0.06%	0.01%
17:T	7.45%	0.00%	0.00%	0.08%	0.00%	0.07%	0.00%	0.05%	0.86%	0.10%	1.34%	0.01%	3.17%	0.02%	0.87%	1.93%	83.83%	0.18%	0.03%	0.00%
18:A	82.28%	0.03%	1.01%	0.05%	0.02%	0.44%	0.03%	0.28%	0.01%	0.06%	0.01%	0.16%	3.74%	0.00%	0.05%	1.97%	7.91%	1.96%	0.00%	0.01%
19:R	0.13%	0.12%	0.04%	0.31%	0.01%	3.58%	0.07%	0.43%	5.78%	0.22%	1.65%	0.58%	0.19%	0.41%	79.84%	2.74%	2.28%	0.14%	1.46%	0.01%
20:I	0.34%	0.05%	0.09%	0.02%	1.72%	0.17%	0.04%	75.82%	0.25%	3.90%	2.89%	0.93%	0.17%	0.01%	0.94%	2.20%	3.85%	6.61%	0.00%	0.01%
21:T	6.36%	0.12%	0.13%	0.01%	0.24%	0.22%	0.08%	4.51%	0.24%	0.33%	0.43%	1.41%	4.55%	0.01%	0.49%	6.20%	73.97%	0.63%	0.01%	0.06%
22:C	0.26%	53.29%	0.80%	0.03%	5.34%	2.16%	1.48%	0.06%	0.07%	0.91%	0.00%	0.79%	0.50%	0.03%	2.23%	10.07%	0.15%	0.11%	7.25%	14.46%
23:S	1.49%	3.49%	0.05%	0.00%	2.83%	0.10%	0.08%	0.06%	0.00%	0.37%	0.00%	0.04%	4.08%	0.00%	0.11%	85.41%	0.77%	0.11%	0.09%	0.90%
24:G	1.90%	0.03%	0.57%	4.40%	0.00%	85.72%	0.02%	0.08%	0.18%	0.09%	0.01%	0.02%	0.11%	0.08%	5.56%	0.22%	0.23%	0.75%	0.03%	0.01%
25:D	2.11%	0.33%	58.21%	9.99%	0.27%	5.21%	5.20%	0.73%	1.09%	0.32%	0.02%	9.07%	0.44%	0.52%	0.53%	1.67%	1.02%	1.54%	0.00%	1.72%
26:A	51.29%	0.03%	0.56%	5.06%	0.07%	1.49%	0.04%	1.31%	0.60%	0.79%	0.14%	0.12%	10.66%	0.21%	0.61%	7.02%	18.10%	1.87%	0.01%	0.02%
27:L	0.63%	0.07%	0.01%	0.38%	2.03%	0.51%	0.00%	0.33%	0.12%	61.07%	3.88%	0.00%	0.48%	0.27%	0.87%	3.82%	0.21%	23.24%	2.06%	0.01%
28:P	3.04%	0.02%	0.01%	0.10%	0.02%	0.03%	0.07%	0.04%	0.10%	0.87%	0.00%	0.01%	84.15%	0.50%	0.77%	7.06%	3.13%	0.05%	0.00%	0.00%
29:K	0.42%	0.05%	0.98%	10.18%	0.05%	1.23%	1.16%	1.74%	48.71%	0.93%	3.42%	6.27%	0.42%	9.11%	9.40%	0.88%	3.71%	0.71%	0.37%	0.28%
30:Q	0.50%	0.07%	1.26%	5.36%	0.10%	0.52%	8.83%	0.75%	20.91%	2.15%	0.14%	5.41%	4.09%	40.30%	5.92%	0.86%	2.04%	0.25%	0.04%	0.50%
31:Y	0.29%	12.34%	4.47%	0.43%	13.51%	0.58%	7.12%	0.48%	0.29%	2.36%	0.02%	3.26%	0.81%	0.47%	1.18%	13.79%	0.43%	0.34%	0.25%	37.61%
32:A	54.12%	0.43%	2.51%	0.22%	0.68%	5.16%	0.29%	1.47%	0.03%	0.87%	0.03%	0.73%	6.87%	0.02%	0.35%	6.11%	13.52%	6.41%	0.01%	0.16%
33:Y	0.37%	11.03%	4.88%	0.12%	12.61%	0.35%	7.62%	0.27%	0.27%	1.54%	0.01%	3.55%	0.63%	1.77%	0.63%	12.12%	0.37%	0.33%	0.18%	41.34%
34:W	0.09%	14.37%	0.13%	0.10%	0.86%	2.96%	0.20%	0.02%	0.04%	1.17%	0.02%	0.07%	0.13%	0.05%	6.11%	2.40%	0.05%	0.07%	69.33%	1.82%
35:Y	0.30%	10.73%	8.22%	0.39%	5.02%	0.64%	9.02%	0.88%	1.65%	1.22%	0.03%	12.42%	0.36%	0.27%	0.97%	5.86%	0.50%	0.29%	0.21%	41.02%
36:Q	0.12%	0.02%	0.18%	2.45%	0.03%	0.14%	9.04%	0.04%	1.84%	2.91%	0.07%	0.22%	3.87%	73.33%	5.07%	0.12%	0.15%	0.14%	0.06%	0.18%
37:Q	0.33%	0.02%	0.38%	6.84%	0.01%	0.49%	1.64%	0.14%	27.46%	1.95%	1.44%	0.95%	1.33%	47.92%	6.52%	0.32%	1.29%	0.31%	0.57%	0.09%
38:K	0.27%	0.00%	0.17%	4.78%	0.00%	0.78%	0.05%	0.36%	67.93%	0.25%	5.08%	1.16%	0.13%	2.55%	11.29%	0.26%	4.47%	0.29%	0.17%	0.01%
39:P	7.07%	0.01%	0.01%	0.12%	0.03%	0.12%	0.12%	0.14%	0.19%	2.18%	0.02%	0.03%	66.96%	0.65%	1.34%	14.60%	6.18%	0.23%	0.01%	0.01%
40:G	0.96%	0.41%	2.59%	0.11%	0.01%	93.42%	0.02%	0.02%	0.00%	0.03%	0.00%	0.03%	0.02%	0.00%	0.63%	1.01%	0.02%	0.70%	0.01%	0.01%
41:Q	0.05%	0.00%	0.01%	1.45%	0.00%	0.05%	0.82%	0.00%	0.87%	1.65%	0.05%	0.01%	5.16%	85.67%	3.97%	0.04%	0.15%	0.02%	0.01%	0.00%
42:A	91.82%	0.01%	0.43%	0.14%	0.01%	1.47%	0.01%	0.05%	0.01%	0.01%	0.00%	0.04%	1.01%	0.00%	0.02%	0.79%	2.73%	1.43%	0.00%	0.01%
43:P	0.65%	0.04%	0.02%	0.00%	0.04%	0.04%	0.78%	0.04%	0.00%	2.07%	0.00%	0.02%	91.64%	0.06%	1.52%	1.86%	1.14%	0.06%	0.00%	0.01%
44:V	4.21%	0.01%	0.40%	2.79%	0.43%	2.96%	0.01%	1.28%	0.14%	11.56%	4.32%	0.02%	0.67%	0.15%	0.29%	0.25%	0.57%	69.86%	0.07%	0.00%
45:L	0.29%	0.01%	0.01%	0.14%	0.31%	0.14%	0.06%	0.30%	0.12%	84.09%	2.50%	0.01%	3.61%	1.32%	0.89%	0.46%	0.24%	5.37%	0.12%	0.00%
46:V	5.41%	0.01%	0.37%	4.24%	0.14%	4.53%	0.01%	2.36%	0.35%	7.92%	6.30%	0.03%	0.26%	0.10%	0.37%	0.23%	0.69%	66.60%	0.07%	0.00%
47:I	0.90%	0.01%	0.10%	0.51%	0.64%	0.38%	0.04%	55.87%	5.57%	6.07%	5.81%	1.04%	0.50%	0.23%	4.79%	0.76%	11.72%	5.05%	0.01%	0.01%
48:Y	0.21%	7.97%	3.79%	0.30%	9.89%	0.26%	9.14%	0.54%	0.31%	2.09%	0.02%	4.27%	0.61%	0.90%	0.63%	10.44%	0.41%	0.33%	0.21%	47.69%
49:K	1.09%	0.03%	1.37%	11.32%	0.05%	1.15%	0.62%	4.17%	47.61%	0.86%	0.43%	5.44%	0.63%	5.04%	9.91%	1.46%	8.25%	0.39%	0.02%	0.14%
50:D	3.65%	0.07%	81.22%	1.82%	0.04%	7.45%	1.14%	0.08%	0.12%	0.04%	0.00%	1.44%	0.04%	0.07%	0.08%	0.16%	0.11%	1.96%	0.00%	0.51%
51:S	0.31%	4.82%	0.44%	0.03%	0.21%	5.51%	0.56%	2.05%	0.23%	0.15%	0.03%	5.25%	0.27%	0.04%	7.57%	65.94%	6.01%	0.19%	0.11%	0.30%
52:E	3.45%	0.00%	3.46%	79.06%	0.00%	4.86%	0.17%	0.01%	3.01%	0.15%	0.13%	0.11%	0.14%	3.58%	0.40%	0.05%	0.18%	1.15%	0.04%	0.04%
53:R	0.05%	0.04%	0.00%	0.07%	0.00%	8.79%	0.00%	0.06%	1.03%	0.08%	0.74%	0.05%	0.05%	0.08%	84.27%	1.38%	0.66%	0.06%	2.59%	0.00%
54:P	1.51%	0.01%	0.02%	0.00%	0.02%	0.01%	0.95%	0.01%	0.01%	0.58%	0.00%	0.17%	94.30%	0.04%	0.27%	1.53%	0.52%	0.02%	0.00%	0.02%
55:S	1.49%	0.11%	0.00%	0.08%	0.21%	0.02%	0.00%	0.04%	0.01%	2.15%	0.00%	0.00%	5.34%	0.02%	0.07%	89.23%	1.04%	0.03%	0.06%	0.05%
56:G	1.71%	0.06%	1.09%	6.80%	0.01%	84.83%	0.02%	0.06%	0.15%	0.14%	0.07%	0.03%	0.08%	0.15%	2.20%	0.20%	0.12%	2.07%	0.19%	0.01%
57:I	0.51%	0.07%	0.09%	0.03%	2.45%	0.21%	0.04%	70.25%	0.40%	4.45%	3.17%	1.06%	0.28%	0.01%	0.68%	1.90%	6.86%	7.52%	0.00%	0.02%
58:P	1.12%	0.14%	0.03%	0.00%	0.14%	0.07%	0.78%	0.11%	0.00%	1.95%	0.00%	0.04%	88.17%	0.08%	1.47%	3.80%	1.92%	0.13%	0.00%	0.04%
59:E	4.24%	0.01%	6.40%	72.07%	0.01%	6.84%	0.26%	0.03%	3.20%	0.23%	0.16%	0.31%	0.28%	3.41%	0.50%	0.11%	0.39%	1.44%	0.04%	0.09%
60:R	0.62%	0.48%	0.09%	0.95%	0.04%	5.41%	0.63%	0.24%	1.65%	1.48%	0.03%	0.31%	5.30%	3.76%	76.35%	0.90%	0.67%	0.22%	0.83%	0.04%
61:F	0.11%	2.52%	0.09%	0.00%	63.43%	0.11%	0.21%	1.44%	0.01%	23.96%	0.12%	0.10%	0.69%	0.01%	0.33%	3.06%	0.09%	2.63%	0.29%	0.80%
62:S	1.62%	3.33%	0.06%	0.00%	2.70%	0.12%	0.08%	0.06%	0.00%	0.37%	0.00%	0.04%	3.52%	0.00%	0.12%	85.86%	1.07%	0.12%	0.09%	0.84%
63:G	9.08%	0.44%	18.86%	0.65%	0.04%	63.82%	0.14%	0.07%	0.03%	0.06%	0.00%	0.23%	0.08%	0.01%	0.58%	1.05%	0.17%	4.53%	0.04%	0.10%
64:S	1.55%	1.69%	0.02%	0.00%</																