

	A	C	D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	V	W	Y
1:E	4.63%	0.02%	8.35%	66.28%	0.02%	4.71%	0.58%	0.25%	3.78%	0.40%	0.03%	0.81%	0.29%	3.98%	0.53%	0.18%	0.27%	4.60%	0.01%	0.28%
2:I	0.63%	0.30%	0.35%	0.05%	6.07%	0.41%	0.49%	49.54%	0.20%	10.77%	1.78%	2.58%	1.13%	0.02%	0.49%	4.65%	7.95%	12.45%	0.00%	0.14%
3:V	2.63%	0.01%	0.22%	1.89%	0.58%	1.75%	0.01%	1.44%	0.11%	9.97%	3.65%	0.01%	0.26%	0.09%	0.14%	0.15%	0.33%	76.73%	0.04%	0.00%
4:L	0.18%	0.06%	0.00%	0.04%	1.32%	0.13%	0.00%	0.07%	0.04%	79.67%	1.62%	0.00%	0.29%	0.03%	0.27%	9.02%	0.14%	1.91%	5.20%	0.01%
5:T	5.20%	0.00%	0.01%	0.17%	0.00%	0.07%	0.01%	0.67%	2.61%	0.07%	1.19%	0.25%	2.90%	0.06%	1.40%	1.43%	83.85%	0.11%	0.02%	0.00%
6:Q	0.15%	0.02%	0.12%	1.95%	0.01%	0.12%	6.00%	0.02%	6.14%	6.89%	0.34%	0.30%	4.47%	66.31%	5.95%	0.25%	0.31%	0.34%	0.22%	0.09%
7:S	1.56%	1.91%	0.02%	0.00%	1.65%	0.04%	0.02%	0.05%	0.00%	0.16%	0.00%	0.02%	3.52%	0.00%	0.06%	89.25%	1.24%	0.05%	0.05%	0.41%
8:P	1.46%	0.00%	0.00%	0.04%	0.01%	0.01%	0.19%	0.03%	0.01%	3.36%	0.00%	0.00%	91.58%	0.63%	0.65%	1.52%	0.45%	0.05%	0.00%	0.00%
9:G	1.63%	0.23%	3.36%	0.88%	0.02%	89.67%	0.06%	0.06%	0.02%	0.05%	0.00%	0.08%	0.04%	0.01%	1.53%	0.55%	0.07%	1.70%	0.01%	0.04%
10:T	5.71%	0.09%	0.26%	0.01%	0.14%	0.25%	0.07%	2.73%	0.17%	0.10%	0.16%	1.82%	2.40%	0.00%	0.14%	6.21%	79.10%	0.57%	0.00%	0.06%
11:L	0.04%	0.00%	0.00%	0.05%	0.05%	0.02%	0.14%	0.03%	0.03%	87.74%	0.68%	0.00%	4.82%	2.86%	2.11%	0.06%	0.06%	1.30%	0.02%	0.00%
12:S	2.06%	1.59%	0.03%	0.00%	0.87%	0.03%	0.05%	0.02%	0.00%	0.10%	0.00%	0.03%	4.32%	0.00%	0.04%	88.90%	1.37%	0.03%	0.03%	0.52%
13:L	0.07%	0.07%	0.00%	0.03%	3.31%	0.05%	0.00%	0.05%	0.01%	88.93%	0.73%	0.00%	0.23%	0.07%	0.13%	2.39%	0.03%	2.40%	1.46%	0.02%
14:S	2.00%	1.83%	0.02%	0.00%	1.58%	0.04%	0.03%	0.04%	0.00%	0.15%	0.00%	0.02%	4.33%	0.00%	0.05%	88.06%	1.35%	0.05%	0.05%	0.39%
15:P	1.44%	0.00%	0.00%	0.04%	0.01%	0.01%	0.19%	0.03%	0.01%	3.38%	0.00%	0.00%	91.60%	0.63%	0.65%	1.49%	0.45%	0.05%	0.00%	0.00%
16:G	0.46%	0.05%	0.26%	1.55%	0.00%	95.02%	0.00%	0.01%	0.03%	0.02%	0.01%	0.01%	0.01%	0.03%	1.71%	0.15%	0.02%	0.45%	0.20%	0.00%
17:E	2.26%	0.00%	6.33%	72.75%	0.01%	6.24%	0.23%	0.30%	5.14%	0.20%	0.03%	0.51%	0.13%	1.67%	1.16%	1.41%	0.70%	0.89%	0.00%	0.04%
18:R	0.10%	0.09%	0.02%	0.22%	0.01%	9.39%	0.02%	0.66%	1.84%	0.10%	0.05%	0.21%	0.08%	0.14%	83.22%	2.16%	1.61%	0.05%	0.03%	0.01%
19:A	63.83%	0.05%	5.38%	0.44%	0.13%	6.36%	0.08%	0.76%	0.03%	0.24%	0.01%	0.27%	2.77%	0.01%	0.17%	1.86%	4.69%	12.90%	0.00%	0.03%
20:T	5.79%	0.06%	0.17%	0.01%	0.09%	0.18%	0.04%	1.35%	0.12%	0.07%	0.10%	1.22%	4.32%	0.00%	0.10%	4.79%	81.15%	0.41%	0.00%	0.04%
21:L	0.09%	0.06%	0.02%	0.00%	3.14%	0.04%	0.87%	0.74%	0.00%	85.46%	0.03%	0.01%	4.76%	0.06%	1.49%	0.08%	0.04%	3.09%	0.00%	0.02%
22:S	2.43%	1.57%	0.04%	0.00%	1.66%	0.06%	0.13%	0.04%	0.00%	0.45%	0.00%	0.05%	6.56%	0.00%	0.11%	84.62%	1.08%	0.09%	0.05%	1.05%
23:C	0.12%	75.59%	0.39%	0.00%	2.64%	1.70%	0.77%	0.02%	0.02%	0.31%	0.00%	0.38%	0.25%	0.02%	1.58%	6.22%	0.07%	0.05%	0.45%	9.41%
24:R	0.02%	0.04%	0.00%	0.06%	0.00%	4.62%	0.00%	0.02%	0.78%	0.02%	0.22%	0.03%	0.02%	0.02%	90.76%	0.89%	0.42%	0.02%	2.06%	0.00%
25:A	92.70%	0.01%	0.92%	0.03%	0.01%	0.42%	0.01%	0.07%	0.00%	0.01%	0.00%	0.04%	1.06%	0.00%	0.01%	0.80%	2.12%	1.78%	0.00%	0.00%
26:S	0.18%	2.46%	0.14%	0.01%	0.05%	3.90%	0.14%	1.73%	0.13%	0.07%	0.03%	3.97%	0.16%	0.01%	7.17%	74.30%	5.38%	0.08%	0.05%	0.06%
27:Q	0.02%	0.00%	0.03%	0.63%	0.00%	0.06%	3.56%	0.00%	0.63%	2.78%	0.02%	0.04%	3.27%	84.16%	4.59%	0.03%	0.03%	0.03%	0.08%	0.02%
28:S	0.17%	1.14%	0.23%	0.03%	0.08%	3.28%	0.15%	6.39%	0.34%	0.11%	0.13%	6.08%	0.11%	0.01%	6.38%	67.78%	7.31%	0.18%	0.04%	0.06%
29:V	7.08%	0.11%	2.73%	0.38%	4.39%	2.74%	0.22%	6.38%	0.03%	9.57%	0.40%	0.21%	0.92%	0.02%	0.34%	0.52%	0.68%	63.19%	0.01%	0.08%
30:S	0.74%	3.03%	1.67%	0.10%	0.57%	8.65%	0.53%	5.73%	1.07%	0.53%	0.20%	9.01%	0.22%	0.04%	32.63%	29.01%	4.68%	0.67%	0.21%	0.70%
31:S	0.37%	1.44%	0.72%	0.08%	0.16%	4.29%	0.53%	3.23%	1.34%	0.17%	0.15%	9.18%	0.21%	0.04%	35.40%	36.05%	5.96%	0.29%	0.08%	0.31%
32:S	0.49%	1.95%	1.04%	0.09%	0.16%	3.69%	0.63%	3.19%	1.44%	0.17%	0.27%	11.70%	0.23%	0.04%	17.09%	50.19%	6.84%	0.27%	0.15%	0.37%
33:Y	0.11%	10.05%	2.99%	0.06%	6.29%	0.22%	8.41%	0.14%	0.33%	1.26%	0.01%	4.23%	0.37%	0.17%	0.56%	6.20%	0.20%	0.09%	0.37%	57.94%
34:L	0.15%	0.13%	0.00%	0.05%	8.16%	0.05%	0.01%	1.18%	0.03%	77.33%	0.17%	0.00%	1.12%	0.27%	0.34%	9.43%	0.15%	1.18%	0.20%	0.04%
35:A	74.46%	0.14%	3.75%	0.17%	0.18%	3.20%	0.05%	0.35%	0.02%	0.15%	0.02%	0.19%	2.49%	0.00%	0.06%	2.30%	4.34%	8.02%	0.00%	0.10%
36:W	0.18%	13.52%	0.15%	0.30%	0.53%	9.80%	0.10%	0.01%	0.04%	0.82%	0.01%	0.05%	0.10%	0.07%	3.99%	1.83%	0.04%	0.11%	66.95%	1.42%
37:Y	0.22%	9.65%	7.62%	0.29%	4.58%	0.47%	8.39%	0.67%	1.30%	0.92%	0.02%	11.73%	0.25%	0.21%	0.70%	5.04%	0.37%	0.20%	0.15%	47.22%
38:Q	0.09%	0.01%	0.13%	2.13%	0.02%	0.10%	8.26%	0.02%	1.59%	2.52%	0.05%	0.17%	3.29%	76.77%	4.36%	0.09%	0.11%	0.10%	0.04%	0.14%
39:Q	0.24%	0.02%	0.29%	6.21%	0.01%	0.37%	1.39%	0.09%	26.37%	1.75%	1.16%	0.71%	1.18%	52.62%	5.66%	0.23%	0.97%	0.23%	0.46%	0.07%
40:K	0.29%	0.01%	0.29%	2.92%	0.00%	0.46%	0.14%	2.27%	64.97%	0.10%	0.39%	7.24%	0.19%	1.59%	10.90%	0.87%	7.25%	0.08%	0.01%	0.03%
41:P	4.50%	0.92%	0.26%	0.04%	0.80%	0.57%	1.87%	0.63%	0.03%	5.34%	0.03%	0.22%	65.58%	0.20%	4.07%	8.82%	4.99%	0.91%	0.02%	0.21%
42:G	0.93%	0.57%	2.02%	0.07%	0.00%	93.90%	0.02%	2.02%	0.06%	0.01%	0.00%	0.04%	0.01%	0.00%	0.64%	1.23%	0.03%	0.48%	0.01%	0.01%
43:Q	0.04%	0.00%	0.01%	1.22%	0.00%	0.04%	0.93%	0.00%	0.80%	1.44%	0.03%	0.01%	4.01%	88.16%	3.16%	0.03%	0.09%	0.02%	0.01%	0.00%
44:A	55.84%	0.08%	0.44%	0.08%	0.09%	1.24%	0.03%	0.56%	0.01%	0.13%	0.01%	0.16%	10.43%	0.00%	0.09%	5.52%	23.67%	1.60%	0.00%	0.02%
45:P	2.27%	0.13%	0.05%	0.00%	0.14%	0.05%	2.20%	0.08%	0.00%	3.75%	0.00%	0.05%	85.85%	0.10%	1.84%	2.17%	1.13%	0.13%	0.00%	0.07%
46:R	0.03%	0.35%	0.02%	0.05%	0.00%	3.17%	0.01%	0.16%	0.74%	0.03%	0.21%	0.28%	0.03%	0.04%	79.42%	13.81%	0.57%	0.02%	1.03%	0.00%
47:L	0.07%	0.05%	0.01%	0.00%	2.02%	0.03%	0.61%	0.58%	0.01%	88.89%	0.04%	0.07%	4.35%	0.06%	1.31%	0.09%	0.04%	1.78%	0.00%	0.01%
48:L	0.16%	0.09%	0.04%	0.00%	3.88%	0.06%	0.77%	1.21%	0.00%	83.79%	0.04%	0.02%	4.32%	0.06%	1.28%	0.16%	0.05%	4.01%	0.00%	0.04%
49:I	0.39%	0.10%	0.11%	0.03%	3.84%	0.17%	0.08%	63.50%	0.38%	7.11%	6.14%	1.48%	0.30%	0.01%	0.48%	1.56%	4.71%	9.56%	0.01%	0.04%
50:Y	0.14%	9.37%	2.40%	0.12%	10.05%	0.17%	6.94%	0.15%	0.23%	1.19%	0.01%	3.40%	0.43%	0.51%	0.56%	10.76%	0.32%	0.11%	0.15%	53.00%
51:G	4.45%	1.73%	6.73%	0.57%	0.12%	76.09%	0.39%	0.22%	0.03%	0.14%	0.00%	0.52%	0.28%	0.02%	1.95%	4.42%	0.56%	1.52%	0.03%	0.22%
52:A	81.56%	0.01%	0.48%	4.72%	0.02%	1.25%	0.01%	0.29%	0.18%	0.25%	0.03%	0.03%	1.81%	0.05%	0.14%	2.49%	5.19%	1.49%	0.00%	0.01%
53:S	1.68%	2.21%	0.12%	0.00%	2.54%	0.13%	0.15%	0.11%	0.00%	0.43%	0.00%	0.08%	4.28%	0.00%	0.15%	85.33%	1.01%	0.18%	0.03%	1.54%
54:S	0.37%	1.84%	0.44%	0.04%	0.13%	3.38%	0.54%	2.89%	1.26%	0.21%	0.16%	9.05%	0.32%	0.05%	37.01%	35.46%	6.28%	0.22%	0.07%	0.30%
55:R	0.03%	0.04%	0.00%	0.07%	0.00%	4.46%	0.00%	0.03%	0.82%	0.02%	0.23%	0.04%	0.02%	0.03%	90.96%	0.87%	0.42%	0.03%	1.94%	0.00%
56:A	92.90%	0.01%	0.86%	0.04%	0.01%	0.43%	0.01%	0.07%	0.00%	0.02%	0.00%	0.04%	1.02%	0.00%	0.01%	0.83%	2.03%	1.71%	0.00%	0.00%
57:T	3.93%	0.13%	0.14%	0.01%	0.15%	0.31%	0.07%	4.11%	0.14%	0.18%	0.07%	1.94%	3.72%	0.01%	0.34%	8.41%	75.88%	0.41%	0.00%	0.04%
58:G	5.93%	0.40%	12.40%	0.42%	0.03%	75.30%	0.05%	0.07%	0.01%	0.03%	0.00%	0.14%	0.03%	0.00%	0.80%	0.80%	0.10%	3.39%	0.01%	0.08%
59:I	0.31%	0.09%	0.08%	0.01%	3.75%	0.13%	0.04%	75.33%	0.20%	3.84%	3.02%	0.95%	0.17%	0.00%	0.44%	1.67%	4.26%	5.67%	0.00%	0.03%
60:P	1.92%	0.00%	0.00%	0.11%	0.00%	0.03%	0.04%	0.08%	0.03%	1.41%	0.00%	0.00%	88.41%	0.60%	0.90%	4.02%	2.33%	0.10%	0.00%	0.00%
61:D	3.29%	0.04%	85.16%	1.43%	0.03%	6.91%	0.32%	0.06%	0.05%	0.06%	0.00%	0.59%	0.03%	0.03%	0.08%	0.06%	1.52%	0.00%	0.00%	0.30%
62:R	0.15%	0.26%	0.06%	0.26%	0.01%	3.54%	0.05%	0.50%	4.64%	0.12%	1.29%	1.06%	0.10%	0.12%	75.78%	8.42%	2.70%	0.12%	0.79%	0.03%
63:F	0.14%	2.11%	0.06%	0.00%	70.49%	0.07%	0.07%	2.85%	0.01%	15.87%	0.09%	0.06%	0.25%	0.00%	0.14%	2.87%	0.08%	4.25%	0.13%	0.46%
64:S	0.29%	3.01%	0.36%	0.02%	0.12%															