

	A	C	D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	V	W	Y
1:E	5.58%	0.03%	9.53%	58.62%	0.05%	5.76%	0.87%	0.39%	4.46%	0.65%	0.07%	1.16%	0.46%	4.71%	0.87%	0.30%	0.45%	5.57%	0.02%	0.45%
2:I	0.89%	0.46%	0.55%	0.10%	6.96%	0.67%	0.67%	41.52%	0.30%	12.01%	1.95%	2.73%	1.64%	0.05%	0.77%	5.66%	8.99%	13.87%	0.01%	0.20%
3:V	3.29%	0.02%	0.37%	2.39%	0.91%	2.26%	0.02%	1.98%	0.19%	12.30%	4.01%	0.03%	0.43%	0.15%	0.24%	0.28%	0.54%	70.54%	0.06%	0.01%
4:L	0.30%	0.09%	0.00%	0.08%	1.62%	0.20%	0.00%	0.11%	0.07%	74.90%	1.97%	0.00%	0.50%	0.05%	0.44%	10.84%	0.22%	2.43%	6.16%	0.01%
5:T	6.46%	0.01%	0.02%	0.33%	0.01%	0.11%	0.01%	1.00%	3.19%	0.13%	1.30%	0.38%	3.72%	0.10%	1.81%	1.94%	79.26%	0.19%	0.03%	0.00%
6:Q	0.26%	0.03%	0.20%	2.51%	0.03%	0.21%	6.97%	0.04%	6.85%	8.12%	0.50%	0.44%	5.46%	59.22%	7.24%	0.40%	0.52%	0.52%	0.34%	0.13%
7:S	1.97%	2.48%	0.03%	0.01%	2.05%	0.07%	0.04%	0.08%	0.00%	0.28%	0.00%	0.04%	4.57%	0.00%	0.10%	85.89%	1.69%	0.08%	0.09%	0.51%
8:P	1.82%	0.01%	0.00%	0.07%	0.02%	0.02%	0.29%	0.06%	0.01%	4.27%	0.01%	0.00%	88.99%	0.80%	0.91%	1.98%	0.64%	0.09%	0.00%	0.01%
9:G	2.17%	0.28%	4.35%	1.41%	0.03%	85.77%	0.09%	0.10%	0.04%	0.09%	0.00%	0.12%	0.07%	0.02%	2.32%	0.63%	0.11%	2.31%	0.01%	0.06%
10:T	6.98%	0.18%	0.47%	0.03%	0.25%	0.47%	0.13%	3.70%	0.27%	0.22%	0.25%	2.28%	3.23%	0.01%	0.28%	8.04%	72.14%	0.98%	0.00%	0.10%
11:L	0.07%	0.00%	0.00%	0.08%	0.10%	0.03%	0.22%	0.05%	0.06%	84.13%	0.87%	0.00%	6.14%	3.53%	2.77%	0.11%	0.10%	1.71%	0.03%	0.00%
12:S	2.54%	1.95%	0.05%	0.00%	1.17%	0.06%	0.09%	0.05%	0.00%	0.17%	0.00%	0.05%	5.45%	0.00%	0.06%	85.73%	1.84%	0.05%	0.05%	0.67%
13:L	0.12%	0.12%	0.00%	0.05%	4.13%	0.10%	0.01%	0.08%	0.02%	85.66%	0.92%	0.00%	0.39%	0.12%	0.24%	3.04%	0.05%	3.06%	1.87%	0.03%
14:S	2.49%	2.38%	0.03%	0.00%	2.00%	0.07%	0.06%	0.07%	0.00%	0.26%	0.00%	0.04%	5.38%	0.00%	0.09%	84.68%	1.81%	0.08%	0.08%	0.47%
15:P	1.86%	0.01%	0.00%	0.07%	0.01%	0.03%	0.29%	0.05%	0.02%	4.27%	0.01%	0.00%	88.94%	0.77%	0.91%	2.01%	0.63%	0.09%	0.00%	0.00%
16:G	0.63%	0.08%	0.44%	2.08%	0.00%	92.93%	0.01%	0.02%	0.06%	0.04%	0.02%	0.01%	0.03%	0.05%	2.40%	0.25%	0.05%	0.63%	0.26%	0.00%
17:E	2.47%	0.01%	7.60%	66.31%	0.01%	7.29%	0.37%	0.44%	6.03%	0.30%	0.05%	0.77%	0.22%	2.12%	1.81%	1.96%	1.07%	1.12%	0.00%	0.05%
18:R	0.16%	0.14%	0.04%	0.36%	0.01%	11.73%	0.03%	0.81%	2.19%	0.16%	0.07%	0.29%	0.15%	0.23%	78.73%	2.67%	2.05%	0.10%	0.06%	0.01%
19:A	55.74%	0.08%	6.46%	0.65%	0.22%	7.82%	0.13%	1.14%	0.05%	0.42%	0.03%	0.41%	3.40%	0.01%	0.31%	2.38%	5.17%	15.52%	0.00%	0.05%
20:T	7.15%	0.11%	0.28%	0.02%	0.15%	0.30%	0.07%	1.75%	0.19%	0.13%	0.16%	1.48%	5.47%	0.01%	0.18%	6.10%	75.75%	0.64%	0.00%	0.07%
21:L	0.14%	0.08%	0.04%	0.00%	3.82%	0.06%	1.14%	0.92%	0.00%	81.48%	0.06%	0.02%	6.13%	0.10%	1.82%	0.16%	0.07%	3.91%	0.01%	0.03%
22:S	3.04%	1.89%	0.08%	0.00%	2.05%	0.09%	0.21%	0.07%	0.01%	0.72%	0.00%	0.08%	8.23%	0.01%	0.18%	80.46%	1.34%	0.16%	0.09%	1.28%
23:C	0.21%	69.05%	0.63%	0.01%	3.36%	2.13%	1.22%	0.05%	0.03%	0.53%	0.00%	0.58%	0.43%	0.05%	2.06%	7.88%	0.12%	0.09%	0.63%	10.95%
24:R	0.05%	0.05%	0.00%	0.12%	0.00%	5.94%	0.00%	0.04%	0.96%	0.04%	0.28%	0.05%	0.03%	0.03%	88.02%	1.13%	0.58%	0.04%	2.64%	0.00%
25:A	90.14%	0.01%	1.18%	0.04%	0.02%	0.57%	0.02%	0.14%	0.01%	0.04%	0.00%	0.07%	1.47%	0.00%	0.02%	1.12%	2.79%	2.36%	0.00%	0.01%
26:S	0.30%	3.09%	0.22%	0.01%	0.08%	4.89%	0.24%	2.12%	0.21%	0.12%	0.05%	4.62%	0.27%	0.01%	9.01%	67.85%	6.60%	0.13%	0.09%	0.09%
27:Q	0.04%	0.01%	0.06%	0.89%	0.01%	0.11%	4.35%	0.01%	0.81%	3.59%	0.04%	0.06%	4.22%	79.63%	5.84%	0.05%	0.05%	0.07%	0.13%	0.05%
28:S	0.29%	1.48%	0.38%	0.06%	0.13%	4.04%	0.22%	7.49%	0.56%	0.20%	0.19%	7.06%	0.19%	0.02%	7.66%	60.42%	9.15%	0.30%	0.06%	0.09%
29:V	8.08%	0.73%	3.11%	0.60%	5.08%	3.20%	0.36%	7.00%	0.05%	11.56%	0.56%	0.32%	1.42%	0.05%	0.50%	0.83%	1.04%	55.94%	0.01%	0.12%
30:S	1.14%	3.12%	2.37%	0.21%	0.84%	9.73%	0.77%	6.04%	1.53%	0.85%	0.30%	8.94%	0.36%	0.09%	34.80%	21.34%	5.33%	1.03%	0.32%	0.91%
31:S	0.60%	1.66%	1.08%	0.17%	0.25%	5.61%	0.80%	3.81%	1.94%	0.30%	0.23%	9.49%	0.35%	0.10%	38.66%	27.14%	6.74%	0.50%	0.13%	0.45%
32:S	0.81%	2.38%	1.58%	0.16%	0.27%	4.69%	0.96%	3.66%	2.02%	0.30%	0.39%	12.40%	0.41%	0.08%	19.17%	41.53%	7.94%	0.47%	0.23%	0.54%
33:Y	0.20%	11.41%	3.86%	0.11%	7.33%	0.39%	9.85%	0.24%	0.51%	1.95%	0.02%	4.91%	0.64%	0.28%	0.89%	7.69%	0.34%	0.17%	0.58%	48.63%
34:L	0.25%	0.22%	0.01%	0.09%	9.21%	0.07%	0.03%	1.45%	0.05%	71.91%	0.26%	0.01%	1.72%	0.40%	0.56%	11.63%	0.24%	1.52%	0.32%	0.06%
35:A	68.29%	0.21%	4.82%	0.25%	0.29%	3.91%	0.09%	0.53%	0.04%	0.28%	0.05%	0.28%	2.98%	0.01%	0.10%	2.77%	4.94%	10.01%	0.01%	0.16%
36:W	0.30%	14.52%	0.29%	0.45%	0.77%	11.71%	0.20%	0.02%	0.06%	1.06%	0.02%	0.10%	0.18%	0.12%	4.98%	2.50%	0.07%	0.18%	60.50%	1.96%
37:Y	0.34%	11.28%	8.54%	0.45%	5.25%	0.75%	9.33%	1.01%	1.81%	1.42%	0.04%	12.59%	0.44%	0.32%	1.18%	6.39%	0.61%	0.35%	0.24%	37.66%
38:Q	0.14%	0.03%	0.21%	2.59%	0.04%	0.18%	9.44%	0.04%	1.95%	3.10%	0.08%	0.26%	4.16%	71.50%	5.50%	0.15%	0.18%	0.17%	0.07%	0.21%
39:Q	0.39%	0.02%	0.43%	7.19%	0.02%	0.61%	1.58%	0.16%	27.89%	2.08%	1.69%	1.02%	1.40%	45.35%	7.18%	0.37%	1.47%	0.37%	0.66%	0.10%
40:K	0.49%	0.02%	0.49%	3.63%	0.01%	0.75%	0.23%	2.72%	56.94%	0.17%	0.58%	8.25%	0.31%	1.88%	13.21%	1.37%	8.77%	0.13%	0.02%	0.05%
41:P	4.94%	1.34%	0.39%	0.07%	1.17%	0.84%	2.14%	0.88%	0.05%	6.00%	0.05%	0.33%	58.98%	0.32%	4.62%	10.43%	5.74%	1.37%	0.04%	0.31%
42:G	1.20%	0.73%	2.58%	0.11%	0.01%	91.97%	0.03%	0.03%	0.01%	0.02%	0.00%	0.07%	0.02%	0.00%	0.89%	1.54%	0.05%	0.68%	0.02%	0.02%
43:Q	0.06%	0.00%	0.02%	1.54%	0.00%	0.08%	1.26%	0.00%	1.00%	1.79%	0.04%	0.02%	5.09%	84.78%	4.08%	0.04%	0.14%	0.03%	0.02%	0.01%
44:A	47.37%	0.13%	0.53%	0.12%	0.15%	1.48%	0.05%	0.87%	0.02%	0.20%	0.02%	0.25%	12.06%	0.00%	0.14%	7.03%	27.79%	1.75%	0.00%	0.03%
45:P	2.87%	0.19%	0.08%	0.01%	0.24%	0.09%	2.74%	0.13%	0.00%	4.82%	0.00%	0.08%	81.77%	0.16%	2.40%	2.72%	1.36%	0.22%	0.00%	0.11%
46:R	0.05%	0.54%	0.04%	0.08%	0.01%	4.06%	0.02%	0.26%	0.90%	0.05%	0.25%	0.44%	0.06%	0.07%	75.49%	15.58%	0.83%	0.04%	1.20%	0.01%
47:L	0.12%	0.08%	0.03%	0.00%	2.46%	0.04%	0.81%	0.75%	0.01%	85.48%	0.05%	0.10%	5.64%	0.10%	1.68%	0.16%	0.07%	2.39%	0.00%	0.02%
48:L	0.27%	0.16%	0.07%	0.01%	4.70%	0.11%	1.00%	1.52%	0.00%	79.33%	0.06%	0.03%	5.51%	0.09%	1.58%	0.27%	0.08%	5.12%	0.00%	0.07%
49:I	0.68%	0.15%	0.19%	0.05%	4.45%	0.29%	0.12%	55.65%	0.56%	8.90%	6.53%	1.73%	0.52%	0.02%	0.77%	1.94%	5.85%	11.52%	0.01%	0.06%
50:Y	0.23%	10.92%	2.82%	0.19%	11.48%	0.29%	8.03%	0.26%	0.34%	1.85%	0.02%	3.81%	0.71%	0.77%	0.91%	13.09%	0.52%	0.20%	0.24%	43.34%
51:G	5.20%	2.10%	8.00%	0.92%	0.20%	70.24%	0.63%	0.35%	0.06%	0.22%	0.01%	0.78%	0.47%	0.04%	2.44%	5.18%	0.87%	1.92%	0.06%	0.31%
52:A	75.26%	0.02%	0.77%	5.89%	0.04%	1.71%	0.03%	0.46%	0.29%	0.44%	0.07%	0.05%	2.55%	0.09%	0.23%	3.41%	6.59%	2.07%	0.01%	0.01%
53:S	2.10%	2.76%	0.20%	0.01%	3.27%	0.22%	0.25%	0.17%	0.01%	0.75%	0.01%	0.14%	5.41%	0.01%	0.25%	80.90%	1.25%	0.30%	0.06%	1.93%
54:S	0.60%	2.03%	0.67%	0.07%	0.21%	3.93%	0.79%	3.37%	1.86%	0.35%	0.23%	9.41%	0.52%	0.11%	40.73%	26.88%	7.32%	0.38%	0.11%	0.43%
55:R	0.05%	0.05%	0.01%	0.12%	0.00%	5.76%	0.00%	0.04%	1.04%	0.05%	0.32%	0.06%	0.03%	0.05%	88.23%	1.12%	0.58%	0.04%	2.46%	0.00%
56:A	90.49%	0.01%	1.15%	0.07%	0.02%	0.57%	0.01%	0.13%	0.01%	0.03%	0.00%	0.07%	1.36%	0.00%	0.02%	1.16%	2.60%	2.29%	0.00%	0.00%
57:T	4.52%	0.21%	0.22%	0.02%	0.24%	0.50%	0.11%	4.67%	0.22%	0.32%	0.12%	2.31%	4.77%	0.01%	0.56%	10.68%	69.81%	0.63%	0.00%	0.06%
58:G	7.27%	0.49%	15.06%	0.69%	0.06%	69.18%	0.08%	0.11%	0.03%	0.06%	0.00%	0.21%	0.07%	0.01%	1.07%	0.92%	0.16%	4.39%	0.01%	0.12%
59:I	0.52%	0.15%	0.15%	0.02%	4.43%	0.22%	0.07%	68.55%	0.31%	5.19%	3.53%	1.16%	0.31%	0.01%	0.74%	2.16%	5.28%	7.14%	0.01%	0.05%
60:P	2.47%	0.01%	0.01%	0.17%	0.01%	0.05%	0.07%	0.13%	0.04%	1.80%	0.01%	0.00%	84.97%	0.76%	1.18%	5.22%	2.92%	0.16%	0.00%	0.00%
61:D	4.04%	0.05%	81.00%	1.87%	0.05%	8.79%	0.41%	0.10%	0.08%	0.10%	0.00%	0.72%	0.05%	0.05%	0.06%	0.12%	0.10%	2.04%	0.00%	0.36%
62:R	0.27%	0.37%	0.12%	0.41%	0.03%	4.47%	0.09%	0.74%	5.39%	0.21%	1.44%	1.54%	0.18%	0.19%	70.50%	9.34%	3.50%	0.19%	0.98%	0.05%
63:F	0.23%	2.60%	0.10%	0.01%	62.92%	0.10%	0.12%	3.36%	0.01%	19.70%	0.14%	0.09%	0.45%	0.01%	0.23%	3.77%	0.14%	5.21%	0.22%	0.59%
64:S	0.45%	3.65%	0.58%	0.05																