

	A	C	D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	V	W	Y
1:D	5.88%	0.54%	55.45%	4.64%	0.52%	5.85%	5.45%	0.53%	0.57%	0.59%	0.02%	5.32%	0.55%	0.39%	0.69%	0.97%	0.56%	5.87%	0.01%	5.60%
2:I	0.68%	0.19%	0.16%	0.02%	4.34%	0.30%	0.07%	69.57%	0.32%	4.57%	1.94%	1.27%	0.45%	0.01%	0.55%	2.55%	5.61%	7.33%	0.01%	0.05%
3:Q	0.11%	0.02%	0.15%	0.94%	0.02%	0.09%	5.09%	0.01%	1.05%	1.06%	0.03%	0.16%	3.21%	85.26%	2.17%	0.18%	0.15%	0.05%	0.04%	0.22%
4:M	0.76%	0.00%	0.01%	0.48%	0.05%	0.54%	0.00%	3.47%	4.87%	6.28%	62.37%	0.11%	0.27%	0.14%	4.85%	0.38%	8.13%	7.07%	0.19%	0.00%
5:T	8.48%	0.07%	0.14%	0.05%	0.10%	0.25%	0.09%	3.18%	0.48%	0.15%	0.09%	2.15%	4.09%	0.01%	0.47%	4.43%	75.40%	0.31%	0.00%	0.04%
6:Q	0.08%	0.01%	0.10%	1.17%	0.01%	0.09%	9.68%	0.00%	0.90%	3.95%	0.05%	0.08%	4.89%	72.59%	6.01%	0.08%	0.09%	0.07%	0.03%	0.08%
7:S	2.10%	2.79%	0.04%	0.01%	2.34%	0.10%	0.05%	0.10%	0.00%	0.34%	0.01%	0.05%	5.01%	0.00%	0.14%	84.23%	1.92%	0.10%	0.11%	0.57%
8:P	2.01%	0.02%	0.02%	0.13%	0.04%	0.05%	0.42%	0.06%	0.04%	4.59%	0.02%	0.01%	85.93%	1.73%	1.63%	2.32%	0.81%	0.14%	0.02%	0.01%
9:S	2.18%	9.33%	0.64%	0.04%	11.65%	0.52%	0.89%	0.22%	0.04%	2.81%	0.04%	0.42%	5.13%	0.02%	0.90%	55.63%	1.20%	0.59%	0.86%	6.88%
10:S	2.43%	3.48%	0.16%	0.01%	2.93%	0.17%	0.18%	0.05%	0.01%	0.71%	0.00%	0.10%	7.21%	0.01%	0.14%	79.36%	1.18%	0.24%	0.12%	1.53%
11:L	0.10%	0.00%	0.00%	0.10%	0.11%	0.05%	0.28%	0.06%	0.06%	82.33%	0.91%	0.00%	6.87%	3.86%	3.10%	0.14%	0.12%	1.87%	0.03%	0.00%
12:S	2.84%	2.60%	0.05%	0.00%	2.55%	0.07%	0.09%	0.08%	0.01%	0.44%	0.00%	0.05%	5.97%	0.00%	0.12%	82.05%	2.11%	0.10%	0.12%	0.74%
13:A	61.07%	0.03%	0.84%	5.49%	0.07%	1.83%	0.05%	0.88%	0.54%	0.67%	0.16%	0.11%	8.09%	0.21%	0.53%	4.21%	12.78%	2.39%	0.02%	0.02%
14:S	1.64%	11.65%	0.24%	0.04%	10.46%	0.61%	0.51%	0.48%	0.01%	1.96%	0.02%	0.22%	5.44%	0.03%	1.10%	60.30%	1.81%	0.59%	0.28%	2.61%
15:V	8.37%	0.02%	0.42%	7.12%	0.84%	5.72%	0.06%	7.70%	0.54%	16.89%	1.25%	0.05%	1.60%	0.35%	0.69%	1.05%	2.08%	45.22%	0.02%	0.01%
16:G	1.07%	0.08%	0.43%	2.57%	0.00%	82.39%	0.04%	0.10%	0.16%	0.13%	0.01%	0.03%	0.16%	0.18%	11.60%	0.37%	0.22%	0.41%	0.05%	0.01%
17:D	4.11%	0.11%	76.96%	2.01%	0.07%	9.43%	1.34%	0.16%	0.19%	0.08%	0.01%	1.67%	0.14%	0.12%	0.15%	0.27%	0.28%	2.40%	0.00%	0.49%
18:R	0.20%	0.13%	0.05%	0.33%	0.01%	6.89%	0.04%	1.23%	3.10%	0.14%	0.13%	0.45%	0.18%	0.16%	79.18%	3.63%	4.02%	0.08%	0.05%	0.01%
19:V	6.00%	0.06%	2.21%	0.21%	1.58%	4.04%	0.05%	4.58%	0.02%	3.28%	0.18%	0.11%	0.30%	0.01%	0.17%	0.30%	0.49%	76.41%	0.00%	0.02%
20:T	7.71%	0.14%	0.17%	0.02%	0.27%	0.27%	0.11%	4.59%	0.14%	0.41%	0.13%	1.48%	5.58%	0.01%	1.00%	6.97%	70.20%	0.75%	0.00%	0.06%
21:I	0.78%	0.24%	0.18%	0.03%	6.05%	0.36%	0.10%	58.74%	0.38%	7.90%	3.14%	1.21%	0.49%	0.02%	1.30%	2.28%	4.92%	11.80%	0.01%	0.07%
22:T	6.59%	0.24%	0.15%	0.01%	0.27%	0.29%	0.09%	3.20%	0.15%	0.25%	0.15%	1.44%	6.68%	0.01%	0.37%	9.83%	69.74%	0.44%	0.01%	0.07%
23:C	0.09%	75.76%	0.42%	0.02%	1.35%	3.49%	0.64%	0.06%	0.03%	0.31%	0.00%	0.30%	0.15%	0.02%	6.91%	3.86%	0.06%	0.05%	3.33%	3.15%
24:Q	0.08%	0.00%	0.03%	1.71%	0.00%	0.09%	1.17%	0.00%	1.02%	2.09%	0.06%	0.02%	6.26%	82.17%	4.94%	0.07%	0.21%	0.04%	0.03%	0.01%
25:A	82.36%	0.00%	0.10%	2.35%	0.00%	1.30%	0.00%	0.05%	0.08%	0.35%	0.37%	0.01%	1.93%	0.02%	0.06%	1.28%	4.63%	5.08%	0.01%	0.00%
26:S	0.19%	2.41%	0.27%	0.02%	0.05%	8.51%	0.40%	1.59%	0.26%	0.14%	0.06%	4.37%	0.26%	0.02%	11.94%	66.44%	2.79%	0.13%	0.09%	0.07%
27:Q	0.07%	0.01%	0.12%	0.88%	0.01%	0.12%	4.89%	0.01%	0.87%	3.20%	0.04%	0.08%	6.80%	76.78%	5.71%	0.08%	0.09%	0.08%	0.14%	0.06%
28:D	3.66%	0.08%	76.85%	5.79%	0.04%	4.01%	0.98%	0.17%	0.38%	0.06%	0.01%	3.02%	0.06%	0.10%	0.16%	0.29%	0.23%	3.61%	0.00%	0.53%
29:I	0.82%	0.31%	0.30%	0.08%	5.05%	0.45%	0.34%	49.95%	0.92%	6.88%	5.86%	2.69%	0.93%	0.05%	1.48%	5.00%	11.09%	7.68%	0.02%	0.11%
30:S	1.30%	3.19%	2.66%	0.33%	0.84%	10.20%	0.90%	5.90%	2.15%	1.05%	0.30%	8.23%	0.43%	0.14%	33.59%	20.72%	5.41%	1.25%	0.46%	0.95%
31:N	0.80%	0.58%	8.72%	1.13%	0.40%	0.88%	6.01%	3.48%	10.56%	0.51%	0.43%	44.66%	0.55%	0.66%	2.71%	7.28%	7.63%	0.49%	0.03%	2.48%
32:Y	0.38%	12.42%	3.15%	0.20%	13.21%	0.43%	7.11%	0.32%	0.17%	1.88%	0.01%	3.43%	1.09%	0.29%	0.87%	14.65%	0.59%	0.22%	0.35%	39.24%
33:L	0.42%	0.27%	0.02%	0.16%	9.00%	0.11%	0.03%	1.05%	0.05%	70.39%	0.21%	0.01%	0.84%	0.22%	0.26%	13.68%	0.20%	2.66%	0.33%	0.09%
34:N	1.03%	1.09%	6.88%	0.91%	0.96%	1.29%	5.95%	6.25%	6.16%	1.15%	0.43%	32.51%	1.19%	2.17%	2.46%	13.40%	11.91%	1.06%	0.04%	3.16%
35:W	0.15%	14.29%	0.22%	0.16%	1.13%	3.79%	0.32%	0.03%	0.07%	1.53%	0.03%	0.12%	0.22%	0.09%	7.37%	3.05%	0.09%	0.12%	65.02%	2.20%
36:Y	0.52%	20.29%	4.29%	0.18%	9.22%	0.77%	10.81%	1.06%	0.35%	2.32%	0.02%	6.24%	1.29%	0.46%	1.65%	11.79%	0.83%	0.64%	0.50%	26.77%
37:Q	0.32%	0.06%	0.42%	4.01%	0.06%	0.43%	9.45%	0.07%	2.52%	4.42%	0.14%	0.32%	5.77%	61.94%	8.67%	0.26%	0.25%	0.42%	0.27%	0.21%
38:Q	0.47%	0.03%	0.49%	7.55%	0.02%	0.72%	1.72%	0.21%	27.25%	2.27%	1.85%	1.16%	1.56%	43.23%	7.91%	0.45%	1.77%	0.43%	0.78%	0.11%
39:K	0.62%	0.02%	0.61%	3.95%	0.02%	0.93%	0.29%	2.95%	53.06%	0.20%	0.71%	8.73%	0.36%	2.00%	14.11%	1.66%	9.54%	0.16%	0.02%	0.07%
40:P	6.21%	0.06%	0.10%	2.70%	0.13%	0.86%	0.41%	0.68%	0.38%	4.82%	0.09%	0.04%	53.94%	1.43%	2.90%	16.77%	7.63%	0.79%	0.02%	0.04%
41:G	1.82%	0.06%	0.75%	8.61%	0.00%	82.56%	0.02%	0.03%	0.24%	0.20%	0.12%	0.02%	0.09%	0.23%	2.08%	0.22%	0.12%	2.53%	0.29%	0.01%
42:K	0.48%	0.03%	1.03%	7.93%	0.02%	1.00%	0.79%	2.03%	53.57%	0.27%	0.26%	8.47%	0.37%	4.65%	9.29%	1.83%	7.64%	0.19%	0.00%	0.13%
43:A	38.99%	0.10%	11.60%	0.64%	0.20%	15.32%	0.14%	0.66%	0.04%	0.54%	0.03%	0.23%	0.85%	0.01%	0.14%	0.90%	1.73%	27.79%	0.00%	0.07%
44:P	0.97%	0.07%	0.03%	0.01%	0.07%	0.04%	0.61%	0.09%	0.00%	1.60%	0.00%	0.03%	90.75%	0.11%	1.04%	2.76%	1.70%	0.10%	0.00%	0.02%
45:K	1.12%	0.11%	2.86%	12.35%	0.13%	1.62%	1.11%	1.70%	42.88%	1.31%	3.02%	7.11%	0.69%	6.07%	9.03%	2.08%	5.56%	0.73%	0.28%	0.24%
46:L	0.90%	0.43%	0.14%	0.03%	10.62%	0.25%	0.63%	3.94%	0.06%	63.63%	0.41%	0.17%	3.92%	0.09%	1.56%	1.40%	0.66%	11.02%	0.03%	0.11%
47:L	0.25%	0.02%	0.02%	0.12%	0.74%	0.11%	0.25%	0.85%	0.10%	81.78%	1.56%	0.01%	5.00%	2.47%	2.63%	0.45%	0.29%	3.25%	0.09%	0.01%
48:I	0.81%	0.10%	0.27%	0.07%	2.91%	0.38%	0.10%	61.39%	1.12%	5.91%	6.18%	1.75%	0.35%	0.04%	1.05%	1.84%	6.34%	9.35%	0.01%	0.04%
49:Y	0.32%	11.78%	5.03%	0.14%	6.42%	0.59%	13.22%	0.33%	0.98%	2.32%	0.04%	6.84%	1.01%	0.58%	1.95%	7.38%	0.71%	0.25%	0.14%	39.98%
50:D	2.41%	0.49%	41.44%	10.07%	0.51%	4.74%	14.68%	0.69%	1.30%	0.87%	0.05%	10.37%	1.04%	1.47%	1.35%	2.42%	2.08%	1.18%	0.01%	2.85%
51:A	44.50%	0.06%	0.83%	5.34%	0.13%	1.70%	0.06%	1.61%	0.90%	1.10%	0.23%	0.15%	12.23%	0.31%	0.86%	8.27%	19.56%	2.09%	0.04%	0.04%
52:S	2.35%	2.93%	0.24%	0.03%	3.19%	0.28%	0.31%	0.20%	0.02%	1.44%	0.02%	0.16%	5.92%	0.01%	0.32%	78.46%	1.36%	0.46%	0.26%	2.04%
53:N	0.90%	0.60%	3.91%	0.43%	0.35%	0.82%	4.88%	3.33%	4.16%	0.42%	0.11%	46.69%	0.86%	0.44%	1.99%	14.23%	13.87%	0.29%	0.02%	1.69%
54:L	0.27%	0.14%	0.01%	0.11%	1.90%	0.20%	0.01%	0.16%	0.05%	80.91%	1.10%	0.00%	0.56%	0.14%	0.58%	5.78%	0.14%	4.01%	3.91%	0.02%
55:E	4.96%	0.01%	11.17%	61.76%	0.01%	8.91%	0.42%	0.40%	4.89%	0.28%	0.07%	0.83%	0.34%	1.84%	1.35%	0.29%	0.95%	1.43%	0.00%	0.08%
56:T	6.28%	0.03%	0.07%	2.71%	0.11%	1.09%	0.07%	6.28%	3.51%	1.78%	1.07%	0.23%	4.82%	0.33%	6.01%	6.45%	58.02%	1.13%	0.01%	0.01%
57:G	0.53%	0.04%	0.27%	2.05%	0.00%	93.60%	0.01%	0.01%	0.06%	0.05%	0.03%	0.01%	0.03%	0.05%	2.15%	0.13%	0.04%	0.60%	0.33%	0.00%
58:V	6.03%	0.03%	1.36%	0.26%	0.63%	2.87%	0.02%	3.03%	0.04%	1.69%	0.22%	0.06%	0.13%	0.02%	0.07%	0.16%	0.32%	83.06%	0.00%	0.01%
59:P	2.70%	0.01%	0.01%	0.09%	0.05%	0.08%	0.16%	0.11%	0.04%	1.89%	0.02%	0.01%	83.60%	0.80%	1.13%	5.73%	3.32%	0.22%	0.01%	0.01%
60:S	2.30%	0.30%	0.05%	0.76%	0.60%	0.19%	0.02%	0.19%	0.06%	4.37%	0.03%	0.01%	5.53%	0.07%	0.23%	83.33%	1.27%	0.36%	0.19%	0.13%
61:R	0.53%	0.67%	0.47%	1.44%	0.07%	13.21%	0.60%	0.90%	4.84%	0.79%	1.60%	1.47%	0.85%	1.17%	55.36%	7.12%	3.22%	0.65%	4.93%	0.12%
62:F	0.29%	2.83%	0.12%	0.01%	58.94%	0.14%	0.14%	3.60%	0.02%	21.66%	0.18%	0.11%	0.57%	0.02%	0.29%	4.28%	0.19%	5.69%	0.27%	0.66%
63:S	0.57%	3.89%	0.72%	0.08%	0.26%	6.29%	0.60%	2.64%	0.72%	0.28%	0.09%	5.82%	0.62%	0.07%	12.37%	57.48%	6.75%	0.28%	0.17%	0.31%
64:S	2.59%	0.07%	1.3																	