

	A	C	D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	V	W	Y
1:S	4.54%	4.34%	0.29%	0.01%	4.32%	0.29%	0.28%	0.28%	0.01%	0.48%	0.01%	0.28%	4.51%	0.01%	0.30%	70.67%	4.53%	0.28%	0.14%	4.46%
2:S	2.18%	9.19%	0.11%	0.00%	7.55%	0.14%	0.17%	0.10%	0.00%	0.84%	0.00%	0.09%	2.82%	0.01%	0.15%	73.55%	0.72%	0.21%	0.19%	1.98%
3:E	3.53%	0.01%	15.36%	66.45%	0.01%	5.86%	0.44%	0.05%	2.65%	0.15%	0.09%	0.45%	0.19%	2.58%	0.35%	0.11%	0.31%	1.26%	0.02%	0.14%
4:L	0.47%	0.01%	0.00%	0.35%	0.20%	0.35%	0.01%	0.16%	0.27%	75.75%	5.55%	0.00%	1.37%	0.72%	0.82%	1.07%	0.30%	12.03%	0.58%	0.00%
5:T	6.10%	0.05%	0.05%	0.01%	0.05%	0.16%	0.03%	2.60%	0.08%	0.08%	0.06%	0.86%	3.95%	0.00%	0.19%	4.63%	80.94%	0.18%	0.00%	0.01%
6:Q	0.09%	0.00%	0.00%	0.15%	2.64%	0.00%	0.13%	3.52%	0.00%	0.78%	2.23%	0.03%	0.03%	4.75%	81.44%	3.94%	0.05%	0.06%	0.06%	0.05%
7:D	3.13%	0.05%	81.93%	3.75%	0.02%	5.84%	0.76%	0.10%	0.26%	0.03%	0.00%	2.15%	0.03%	0.04%	0.07%	0.21%	0.10%	1.16%	0.00%	0.40%
8:P	1.34%	0.06%	0.03%	0.00%	0.09%	0.07%	0.66%	0.07%	0.00%	1.67%	0.00%	0.03%	90.30%	0.04%	1.29%	2.49%	1.70%	0.13%	0.00%	0.02%
9:A	56.72%	0.37%	1.65%	0.28%	0.45%	3.96%	0.18%	1.80%	0.04%	0.45%	0.03%	0.94%	8.65%	0.01%	0.18%	5.67%	13.34%	5.16%	0.00%	0.12%
10:V	2.26%	0.00%	0.08%	1.88%	0.11%	1.64%	0.00%	0.32%	0.10%	10.93%	4.82%	0.00%	0.24%	0.09%	0.14%	0.10%	0.25%	77.00%	0.04%	0.00%
11:S	2.03%	1.76%	0.02%	0.00%	1.75%	0.03%	0.04%	0.03%	0.00%	0.18%	0.00%	0.03%	4.27%	0.00%	0.06%	87.80%	1.41%	0.04%	0.04%	0.50%
12:V	3.22%	0.00%	0.04%	2.75%	0.04%	2.48%	0.00%	0.16%	0.21%	10.75%	4.52%	0.00%	0.27%	0.12%	0.35%	0.16%	0.53%	74.29%	0.08%	0.00%
13:A	93.31%	0.00%	0.86%	0.03%	0.01%	0.77%	0.01%	0.04%	0.00%	0.02%	0.00%	0.03%	0.98%	0.00%	0.01%	0.53%	2.25%	1.14%	0.00%	0.00%
14:L	0.07%	0.03%	0.00%	0.02%	0.83%	0.20%	0.00%	0.02%	0.01%	87.73%	0.70%	0.00%	0.26%	0.07%	0.67%	5.84%	0.04%	0.79%	2.74%	0.00%
15:G	0.71%	0.02%	0.14%	2.36%	0.00%	87.29%	0.00%	0.05%	0.12%	0.03%	0.00%	0.01%	0.04%	0.03%	8.52%	0.29%	0.10%	0.25%	0.01%	0.00%
16:Q	0.03%	0.00%	0.01%	0.82%	0.00%	0.05%	0.70%	0.00%	0.63%	2.89%	0.02%	0.02%	2.22%	87.30%	5.15%	0.04%	0.03%	0.03%	0.05%	0.01%
17:T	6.62%	0.00%	0.01%	0.09%	0.00%	0.07%	0.00%	0.98%	0.74%	0.08%	0.09%	0.07%	3.25%	0.02%	0.83%	1.69%	85.38%	0.08%	0.00%	0.00%
18:V	4.76%	0.03%	1.54%	0.04%	1.76%	2.86%	0.03%	4.05%	0.01%	5.72%	0.11%	0.04%	0.18%	0.00%	0.08%	0.13%	0.20%	78.45%	0.00%	0.01%
19:R	0.09%	0.13%	0.03%	0.24%	0.01%	3.76%	0.06%	0.34%	5.16%	0.17%	1.51%	0.45%	0.15%	0.28%	81.23%	2.39%	1.92%	0.11%	1.96%	0.01%
20:I	0.25%	0.04%	0.06%	0.01%	1.47%	0.13%	0.02%	79.31%	0.18%	3.30%	2.60%	0.80%	0.12%	0.00%	0.73%	2.04%	3.21%	5.70%	0.00%	0.01%
21:T	4.58%	0.01%	0.01%	0.11%	0.02%	0.15%	0.01%	2.12%	0.97%	0.18%	0.28%	0.14%	1.69%	0.03%	2.49%	2.48%	84.51%	0.21%	0.00%	0.00%
22:C	0.04%	73.23%	0.20%	0.00%	1.08%	4.65%	0.43%	0.02%	0.01%	0.24%	0.00%	0.14%	0.16%	0.01%	9.25%	4.98%	0.03%	0.03%	2.26%	3.24%
23:Q	0.03%	0.01%	0.06%	0.55%	0.01%	0.03%	21.54%	0.02%	0.40%	2.43%	0.00%	0.18%	5.41%	64.17%	4.91%	0.05%	0.06%	0.03%	0.00%	0.11%
24:G	0.87%	0.03%	0.22%	2.01%	0.00%	90.23%	0.01%	0.05%	0.08%	0.05%	0.00%	0.01%	0.05%	0.04%	5.72%	0.18%	0.11%	0.32%	0.01%	0.00%
25:D	3.08%	0.05%	83.97%	1.34%	0.03%	6.68%	0.96%	0.08%	0.10%	0.03%	0.00%	1.25%	0.07%	0.06%	0.06%	0.14%	0.14%	1.57%	0.00%	0.37%
26:S	0.15%	3.74%	0.27%	0.01%	0.02%	5.69%	0.06%	0.50%	0.17%	0.02%	0.03%	1.85%	0.05%	0.00%	9.03%	76.99%	1.20%	0.06%	0.10%	0.06%
27:L	0.05%	0.02%	0.01%	0.00%	0.71%	0.02%	0.85%	0.43%	0.00%	90.48%	0.02%	0.01%	4.63%	0.08%	1.42%	0.05%	0.03%	1.21%	0.00%	0.01%
28:R	0.11%	0.07%	0.03%	0.21%	0.00%	4.45%	0.03%	0.95%	2.44%	0.07%	0.10%	0.42%	0.09%	0.11%	86.55%	2.58%	1.67%	0.07%	0.05%	0.01%
29:S	0.79%	3.41%	2.15%	0.14%	0.29%	7.08%	1.11%	3.03%	1.47%	0.30%	0.29%	11.02%	0.34%	0.07%	17.15%	45.26%	4.87%	0.56%	0.14%	0.54%
30:Y	0.18%	10.01%	1.99%	0.08%	10.87%	0.18%	6.66%	0.25%	0.11%	1.12%	0.00%	3.52%	0.51%	0.31%	0.54%	11.70%	0.35%	0.16%	0.22%	51.23%
31:Y	0.29%	9.61%	4.78%	0.36%	10.91%	0.34%	9.37%	0.19%	0.22%	1.06%	0.01%	3.44%	0.45%	0.52%	0.70%	10.14%	0.26%	0.20%	0.18%	46.98%
32:A	40.96%	0.01%	1.09%	18.76%	0.06%	4.11%	0.05%	1.04%	0.71%	1.57%	0.07%	0.06%	8.04%	0.44%	1.29%	4.73%	13.92%	3.07%	0.00%	0.01%
33:S	0.63%	2.53%	1.67%	0.13%	0.23%	5.73%	1.24%	3.09%	1.88%	0.36%	0.39%	11.06%	0.42%	0.16%	17.97%	45.57%	5.31%	0.47%	0.42%	0.75%
34:W	0.04%	14.13%	0.05%	0.03%	0.57%	1.35%	0.12%	0.01%	0.04%	0.99%	0.02%	0.06%	0.12%	0.08%	4.91%	2.06%	0.04%	0.02%	73.95%	1.43%
35:Y	0.21%	9.75%	7.67%	0.31%	4.64%	0.46%	8.43%	0.69%	1.31%	0.93%	0.02%	11.82%	0.27%	0.21%	0.73%	5.10%	0.38%	0.21%	0.16%	46.73%
36:Q	0.09%	0.02%	0.14%	2.15%	0.02%	0.10%	8.34%	0.02%	1.59%	2.58%	0.05%	0.18%	3.31%	76.47%	4.46%	0.09%	0.11%	0.11%	0.05%	0.14%
37:Q	0.24%	0.01%	0.29%	6.20%	0.01%	0.36%	1.46%	0.09%	26.51%	1.76%	1.15%	0.76%	1.19%	52.28%	5.70%	0.24%	0.98%	0.23%	0.47%	0.07%
38:K	0.20%	0.00%	0.13%	4.24%	0.00%	0.59%	0.03%	0.27%	71.84%	0.19%	4.63%	1.02%	0.09%	2.29%	10.05%	0.19%	3.90%	0.21%	0.12%	0.00%
39:P	6.21%	0.01%	0.00%	0.10%	0.02%	0.09%	0.10%	0.11%	0.16%	1.92%	0.01%	0.02%	70.82%	0.61%	1.16%	12.99%	5.49%	0.18%	0.01%	0.00%
40:G	0.67%	0.03%	0.15%	2.49%	0.00%	87.74%	0.00%	0.07%	0.08%	0.07%	0.00%	0.01%	0.05%	0.03%	7.90%	0.25%	0.10%	0.34%	0.01%	0.00%
41:Q	0.04%	0.00%	0.01%	0.83%	0.00%	0.05%	0.68%	0.00%	0.66%	1.01%	0.01%	0.02%	1.83%	90.99%	3.74%	0.04%	0.03%	0.02%	0.03%	0.01%
42:A	93.26%	0.01%	0.36%	0.10%	0.01%	1.24%	0.00%	0.04%	0.01%	0.01%	0.00%	0.03%	0.83%	0.00%	0.01%	0.62%	2.26%	1.20%	0.00%	0.00%
43:P	0.59%	0.03%	0.01%	0.00%	0.03%	0.03%	0.67%	0.03%	0.00%	1.74%	0.00%	0.01%	92.89%	0.05%	1.28%	1.60%	0.97%	0.04%	0.00%	0.01%
44:V	8.17%	0.01%	0.64%	6.82%	0.42%	5.60%	0.03%	6.60%	0.46%	10.99%	0.75%	0.03%	0.92%	0.40%	0.55%	0.53%	1.18%	55.89%	0.01%	0.01%
45:L	0.44%	0.30%	0.12%	0.02%	8.28%	0.18%	1.15%	4.36%	0.01%	61.90%	0.10%	0.16%	11.55%	0.07%	1.27%	1.31%	0.66%	8.02%	0.00%	0.10%
46:V	4.79%	0.03%	1.42%	0.11%	1.23%	2.32%	0.02%	1.87%	0.00%	2.59%	0.08%	0.03%	0.10%	0.00%	0.04%	0.09%	0.13%	85.13%	0.00%	0.01%
47:I	0.41%	0.11%	0.11%	0.03%	3.89%	0.19%	0.08%	63.03%	0.38%	7.21%	6.15%	1.50%	0.30%	0.01%	0.50%	1.60%	4.79%	9.67%	0.00%	0.04%
48:Y	0.14%	9.48%	2.39%	0.12%	10.15%	0.18%	6.96%	0.17%	0.23%	1.22%	0.01%	3.45%	0.43%	0.52%	0.58%	10.85%	0.33%	0.11%	0.15%	52.54%
49:G	10.50%	1.18%	15.35%	1.45%	0.29%	56.46%	1.00%	0.52%	0.08%	0.39%	0.02%	1.37%	0.70%	0.08%	1.75%	3.24%	1.58%	3.48%	0.05%	0.53%
50:K	0.61%	0.03%	1.51%	10.47%	0.04%	1.33%	0.73%	3.12%	49.56%	0.60%	0.43%	9.16%	0.33%	4.71%	10.14%	1.03%	5.68%	0.29%	0.02%	0.21%
51:N	0.37%	0.49%	7.12%	0.91%	0.36%	0.74%	4.45%	4.09%	11.64%	0.32%	0.31%	52.77%	0.17%	0.66%	2.55%	5.25%	4.06%	0.44%	0.02%	3.31%
52:N	0.25%	0.31%	4.78%	0.38%	0.16%	0.38%	2.77%	2.36%	9.24%	0.14%	0.17%	66.25%	0.17%	0.23%	1.31%	5.33%	3.52%	0.14%	0.01%	2.10%
53:R	0.01%	0.10%	0.00%	0.02%	0.00%	0.90%	0.06%	0.00%	0.03%	0.44%	0.01%	0.00%	0.69%	1.06%	93.85%	0.07%	0.01%	0.02%	2.71%	0.00%
54:P	1.29%	0.01%	0.02%	0.00%	0.02%	0.01%	0.88%	0.01%	0.01%	0.55%	0.00%	0.12%	94.98%	0.03%	0.26%	1.31%	0.47%	0.02%	0.00%	0.01%
55:S	1.34%	0.08%	0.00%	0.06%	0.17%	0.01%	0.00%	0.03%	0.01%	1.84%	0.00%	0.00%	4.55%	0.02%	0.05%	90.85%	0.88%	0.03%	0.04%	0.04%
56:G	1.53%	0.05%	0.84%	6.10%	0.00%	86.97%	0.02%	0.04%	0.12%	0.11%	0.06%	0.02%	0.05%	0.11%	1.79%	0.15%	0.08%	1.80%	0.17%	0.01%
57:I	0.38%	0.05%	0.06%	0.02%	2.06%	0.15%	0.03%	74.54%	0.32%	3.71%	2.86%	0.91%	0.20%	0.01%	0.52%	1.69%	6.04%	6.42%	0.00%	0.01%
58:P	1.90%	0.00%	0.00%	0.11%	0.01%	0.03%	0.04%	0.08%	0.03%	1.42%	0.00%	0.00%	88.39%	0.60%	0.90%	4.03%	2.33%	0.11%	0.00%	0.00%
59:D	2.76%	0.04%	83.44%	3.01%	0.03%	7.21%	0.34%	0.07%	0.08%	0.07%	0.00%	0.61%	0.03%	0.04%	0.04%	0.09%	0.05%	1.75%	0.00%	0.31%
60:R	0.16%	0.08%	0.02%	0.21%	0.02%	1.63%	1.15%	0.04%	0.08%	1.88%	0.00%	0.02%	6.79%	5.52%	81.92%	0.20%	0.12%	0.08%	0.08%	0.02%
61:F	0.08%	2.28%	0.06%	0.00%	67.89%	0.08%	0.14%	1.28%	0.01%	21.38%	0.09%	0.07%	0.50%	0.01%	0.25%	2.64%	0.06%	2.24%	0.23%	0.70%
62:S	1.44%	2.91%	0.05%	0.00%	2.32%	0.09%	0.05%	0.04%	0.00%	0.26%	0.00%	0.03%	3.01%	0.00%	0.09%	87.90%	0.91%	0.10%	0.06%	0.74%
63:G	8.11%	0.38%	16.89%	0.49%	0.03%	68.01%	0.10%	0.05%	0.02%	0.04%	0.00%	0.17%	0.07%	0.01%	0.49%	0.99%	0.12%	3.92%	0.03%	0.08%
64:S	1.32%	1.47%	0.02%																	