

	A	C	D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	V	W	Y
1:S	5.21%	4.61%	0.36%	0.03%	4.33%	0.40%	0.36%	0.36%	0.04%	1.26%	0.04%	0.35%	5.12%	0.02%	0.46%	66.29%	5.22%	0.41%	0.45%	4.69%
2:Y	0.20%	10.31%	2.41%	0.36%	10.73%	0.26%	9.70%	0.26%	0.18%	2.24%	0.01%	3.32%	0.87%	0.59%	0.95%	12.55%	0.42%	0.18%	0.16%	44.30%
3:V	4.32%	0.01%	0.42%	2.85%	0.61%	3.01%	0.02%	1.53%	0.15%	12.51%	4.12%	0.02%	0.73%	0.17%	0.30%	0.31%	0.60%	68.24%	0.09%	0.01%
4:L	0.26%	0.00%	0.00%	0.16%	0.13%	0.19%	0.02%	0.10%	0.09%	85.54%	2.88%	0.00%	1.93%	1.11%	0.87%	0.60%	0.19%	5.56%	0.36%	0.00%
5:T	6.93%	0.07%	0.07%	0.01%	0.07%	0.22%	0.04%	2.96%	0.11%	0.11%	0.07%	1.01%	4.63%	0.00%	0.25%	5.45%	77.74%	0.25%	0.00%	0.01%
6:Q	0.16%	0.01%	0.11%	2.97%	0.00%	0.23%	2.21%	0.00%	0.92%	4.63%	0.05%	0.02%	5.49%	74.53%	8.25%	0.08%	0.08%	0.13%	0.11%	0.02%
7:P	6.36%	0.02%	0.07%	1.19%	0.04%	0.11%	0.06%	0.12%	0.46%	0.88%	0.01%	0.04%	67.41%	0.84%	0.56%	15.38%	6.32%	0.11%	0.01%	0.01%
8:P	1.15%	0.15%	0.06%	0.01%	0.17%	0.06%	1.83%	0.12%	0.01%	2.68%	0.01%	0.09%	88.08%	0.07%	1.43%	2.20%	1.64%	0.12%	0.01%	0.11%
9:S	1.49%	0.10%	0.00%	0.03%	0.10%	0.17%	0.00%	0.00%	0.01%	2.65%	0.02%	0.00%	4.35%	0.02%	0.09%	87.97%	0.78%	0.10%	2.09%	0.02%
10:V	3.95%	0.00%	0.15%	3.21%	0.08%	2.21%	0.01%	0.67%	0.93%	8.15%	6.89%	0.02%	0.24%	0.12%	0.58%	0.12%	1.32%	71.29%	0.04%	0.00%
11:S	2.73%	0.07%	0.00%	0.05%	0.14%	0.03%	0.00%	0.05%	0.02%	1.39%	0.00%	0.00%	5.75%	0.03%	0.06%	87.73%	1.79%	0.06%	0.07%	0.03%
12:V	4.22%	0.00%	0.06%	3.81%	0.04%	3.67%	0.00%	0.35%	0.25%	8.66%	5.31%	0.00%	0.26%	0.14%	0.50%	0.13%	0.54%	71.99%	0.05%	0.00%
13:A	91.62%	0.01%	0.52%	0.14%	0.02%	1.57%	0.01%	0.07%	0.01%	0.03%	0.00%	0.04%	1.16%	0.00%	0.02%	0.65%	2.53%	1.59%	0.00%	0.00%
14:P	0.65%	0.00%	0.00%	0.04%	0.00%	0.01%	0.14%	0.03%	0.01%	1.70%	0.00%	0.00%	92.71%	0.68%	1.05%	1.83%	1.10%	0.02%	0.00%	0.00%
15:G	1.53%	0.03%	0.68%	5.74%	0.01%	81.06%	0.02%	0.18%	0.20%	0.19%	0.02%	0.03%	0.17%	0.11%	8.62%	0.23%	0.23%	0.94%	0.02%	0.01%
16:K	0.43%	0.01%	0.21%	8.18%	0.01%	0.61%	0.11%	0.20%	62.32%	0.63%	4.34%	1.32%	0.28%	6.28%	10.47%	0.26%	3.50%	0.74%	0.08%	0.03%
17:T	7.71%	0.00%	0.00%	0.09%	0.00%	0.08%	0.00%	0.05%	0.91%	0.12%	1.40%	0.02%	3.32%	0.02%	0.93%	1.98%	83.12%	0.21%	0.03%	0.00%
18:A	81.86%	0.03%	1.02%	0.05%	0.03%	0.43%	0.03%	0.30%	0.01%	0.07%	0.01%	0.17%	3.83%	0.00%	0.05%	2.03%	8.10%	1.99%	0.00%	0.01%
19:R	0.14%	0.12%	0.04%	0.32%	0.01%	3.70%	0.08%	0.44%	5.93%	0.24%	1.71%	0.59%	0.20%	0.43%	79.37%	2.64%	2.38%	0.15%	1.49%	0.01%
20:I	0.61%	0.08%	0.26%	0.07%	1.64%	0.21%	0.18%	64.85%	0.55%	3.65%	4.79%	3.21%	0.43%	0.03%	0.61%	2.99%	11.23%	4.55%	0.01%	0.06%
21:T	12.05%	0.48%	0.77%	0.08%	1.02%	0.60%	0.26%	7.25%	0.70%	1.00%	0.96%	3.49%	4.86%	0.04%	0.68%	8.72%	55.14%	1.54%	0.03%	0.33%
22:C	0.17%	67.65%	0.24%	0.01%	3.91%	2.10%	0.70%	0.10%	0.02%	0.80%	0.00%	0.28%	0.50%	0.04%	4.76%	10.78%	0.18%	0.07%	2.53%	5.18%
23:G	0.61%	0.03%	0.14%	2.54%	0.00%	90.51%	0.00%	0.00%	0.08%	0.05%	0.03%	0.00%	0.01%	0.06%	3.62%	0.05%	0.03%	0.65%	1.58%	0.00%
24:G	1.49%	0.02%	1.23%	6.61%	0.01%	64.98%	0.04%	0.51%	1.07%	0.26%	0.05%	0.13%	0.16%	0.21%	18.76%	1.18%	0.67%	2.59%	0.02%	0.01%
25:N	0.57%	0.39%	10.41%	1.19%	0.36%	1.15%	6.92%	4.65%	11.45%	0.48%	0.41%	45.32%	0.27%	0.90%	3.25%	5.32%	4.39%	0.68%	0.01%	1.89%
26:N	0.82%	0.50%	5.00%	0.42%	0.22%	0.90%	2.99%	3.78%	6.81%	0.22%	0.16%	51.25%	0.51%	0.26%	4.99%	9.46%	9.26%	0.27%	0.01%	2.17%
27:I	0.70%	0.93%	0.31%	0.03%	4.41%	1.18%	0.31%	39.85%	0.39%	4.95%	1.74%	3.65%	0.71%	0.03%	1.91%	20.67%	12.18%	5.91%	0.02%	0.12%
28:G	2.06%	0.03%	1.02%	5.84%	0.01%	84.45%	0.02%	0.14%	0.13%	0.23%	0.01%	0.02%	0.16%	0.08%	4.22%	0.19%	0.29%	1.04%	0.03%	0.01%
29:S	1.04%	3.27%	1.91%	0.19%	0.61%	4.63%	1.68%	8.07%	1.15%	0.90%	0.33%	12.66%	1.33%	0.18%	8.25%	40.65%	11.29%	0.97%	0.12%	0.78%
30:K	0.89%	0.04%	1.57%	12.36%	0.07%	1.78%	1.07%	3.41%	44.83%	0.87%	0.49%	7.43%	0.51%	5.17%	11.39%	1.19%	6.27%	0.41%	0.04%	0.22%
31:S	0.43%	6.33%	0.81%	0.10%	0.36%	7.83%	0.87%	2.57%	0.29%	0.33%	0.06%	4.41%	0.33%	0.05%	9.21%	60.77%	4.32%	0.39%	0.12%	0.44%
32:V	4.71%	0.02%	0.20%	3.12%	0.58%	2.95%	0.01%	1.29%	0.13%	10.68%	3.31%	0.01%	0.47%	0.15%	0.27%	0.29%	0.36%	71.35%	0.10%	0.00%
33:H	0.47%	0.34%	2.23%	0.15%	0.57%	0.16%	53.19%	0.46%	1.56%	6.19%	0.05%	8.03%	8.71%	6.17%	7.14%	1.46%	0.89%	0.44%	0.06%	1.73%
34:W	0.10%	14.81%	0.12%	0.10%	0.73%	3.39%	0.15%	0.02%	0.04%	1.11%	0.02%	0.08%	0.15%	0.09%	4.53%	2.49%	0.06%	0.06%	70.11%	1.85%
35:Y	0.31%	10.96%	8.29%	0.40%	5.09%	0.65%	9.11%	0.91%	1.68%	1.29%	0.03%	12.56%	0.38%	0.28%	1.03%	6.03%	0.52%	0.30%	0.21%	39.95%
36:Q	0.12%	0.03%	0.19%	2.50%	0.03%	0.15%	9.19%	0.04%	1.86%	2.94%	0.07%	0.23%	3.95%	72.82%	5.20%	0.12%	0.16%	0.15%	0.06%	0.18%
37:Q	0.36%	0.02%	0.40%	6.91%	0.02%	0.52%	1.61%	0.15%	27.55%	1.98%	1.49%	0.98%	1.37%	47.19%	6.76%	0.33%	1.34%	0.32%	0.60%	0.09%
38:K	0.29%	0.00%	0.18%	4.96%	0.00%	0.81%	0.05%	0.36%	67.18%	0.27%	5.10%	1.19%	0.13%	2.62%	11.58%	0.26%	4.52%	0.30%	0.17%	0.01%
39:P	7.21%	0.01%	0.01%	0.13%	0.03%	0.13%	0.13%	0.15%	0.20%	2.23%	0.01%	0.02%	66.38%	0.66%	1.37%	14.84%	6.23%	0.24%	0.01%	0.01%
40:G	0.97%	0.41%	2.69%	0.11%	0.01%	93.22%	0.02%	0.02%	0.00%	0.03%	0.00%	0.03%	0.02%	0.00%	0.65%	1.04%	0.02%	0.73%	0.01%	0.01%
41:Q	0.05%	0.00%	0.01%	1.48%	0.00%	0.05%	0.85%	0.00%	0.91%	1.70%	0.05%	0.01%	5.34%	85.19%	4.10%	0.04%	0.17%	0.03%	0.01%	0.00%
42:A	91.62%	0.01%	0.45%	0.15%	0.01%	1.50%	0.01%	0.05%	0.01%	0.01%	0.00%	0.04%	1.03%	0.00%	0.01%	0.82%	2.78%	1.48%	0.00%	0.01%
43:P	0.68%	0.05%	0.02%	0.00%	0.04%	0.05%	0.79%	0.04%	0.00%	2.12%	0.00%	0.02%	91.45%	0.07%	1.53%	1.91%	1.16%	0.06%	0.00%	0.01%
44:V	4.34%	0.01%	0.42%	2.81%	0.47%	3.01%	0.02%	1.33%	0.14%	11.77%	4.34%	0.02%	0.74%	0.16%	0.31%	0.27%	0.61%	69.15%	0.07%	0.01%
45:L	0.32%	0.01%	0.01%	0.15%	0.29%	0.15%	0.05%	0.28%	0.12%	83.80%	2.61%	0.01%	3.68%	1.34%	0.90%	0.45%	0.25%	5.46%	0.12%	0.00%
46:V	4.88%	0.02%	1.24%	0.09%	0.89%	2.28%	0.02%	3.82%	0.01%	2.60%	0.12%	0.04%	0.15%	0.00%	0.05%	0.12%	0.23%	83.42%	0.00%	0.01%
47:V	5.10%	0.02%	1.53%	0.40%	0.95%	2.33%	0.04%	2.79%	0.02%	3.47%	0.46%	0.05%	0.20%	0.02%	0.07%	0.12%	0.30%	82.12%	0.00%	0.01%
48:Y	0.21%	10.54%	2.60%	0.15%	11.50%	0.25%	7.56%	0.23%	0.15%	1.65%	0.00%	3.78%	0.62%	0.65%	0.78%	12.91%	0.46%	0.15%	0.23%	45.57%
49:D	2.54%	0.45%	59.23%	6.92%	0.48%	4.80%	7.35%	0.48%	0.48%	0.38%	0.01%	8.13%	0.42%	0.78%	0.55%	1.69%	0.83%	1.20%	0.01%	3.27%
50:D	3.45%	0.45%	54.67%	9.42%	0.56%	5.05%	7.44%	0.56%	1.00%	0.41%	0.03%	7.89%	0.48%	0.74%	0.66%	1.54%	1.04%	1.54%	0.01%	3.05%
51:S	0.56%	4.65%	0.98%	0.07%	0.32%	11.45%	0.40%	2.19%	0.65%	0.27%	0.07%	3.84%	0.21%	0.03%	16.85%	53.31%	3.14%	0.35%	0.27%	0.41%
52:D	3.35%	0.08%	80.64%	3.21%	0.04%	6.69%	1.62%	0.07%	0.15%	0.08%	0.00%	1.33%	0.09%	0.09%	0.15%	0.19%	0.14%	1.55%	0.00%	0.53%
53:R	0.01%	0.12%	0.00%	0.03%	0.00%	0.79%	0.09%	0.00%	0.02%	0.52%	0.01%	0.00%	0.84%	1.24%	93.79%	0.07%	0.02%	0.02%	2.40%	0.00%
54:P	1.55%	0.02%	0.02%	0.00%	0.03%	0.01%	1.01%	0.02%	0.02%	0.69%	0.00%	0.17%	93.80%	0.04%	0.35%	1.63%	0.61%	0.02%	0.00%	0.02%
55:S	1.54%	0.12%	0.01%	0.09%	0.23%	0.02%	0.01%	0.04%	0.01%	2.17%	0.00%	0.00%	5.44%	0.03%	0.07%	89.01%	1.06%	0.03%	0.06%	0.05%
56:G	1.78%	0.07%	1.15%	6.97%	0.01%	84.32%	0.03%	0.06%	0.17%	0.14%	0.07%	0.03%	0.08%	0.16%	2.29%	0.21%	0.12%	2.14%	0.20%	0.01%
57:I	0.54%	0.07%	0.09%	0.03%	2.55%	0.22%	0.04%	69.44%	0.41%	4.58%	3.27%	1.07%	0.29%	0.02%	0.70%	1.97%	6.98%	7.70%	0.01%	0.02%
58:P	1.13%	0.14%	0.04%	0.01%	0.15%	0.07%	0.81%	0.11%	0.00%	2.02%	0.00%	0.04%	87.83%	0.08%	1.49%	3.95%	1.96%	0.14%	0.00%	0.04%
59:E	4.26%	0.01%	6.46%	71.57%	0.01%	7.02%	0.27%	0.03%	3.22%	0.25%	0.16%	0.32%	0.29%	3.49%	0.53%	0.12%	0.40%	1.47%	0.04%	0.08%
60:R	0.65%	0.49%	0.09%	1.01%	0.05%	5.48%	0.64%	0.23%	1.69%	1.50%	0.03%	0.33%	5.40%	3.78%	75.87%	0.93%	0.71%	0.23%	0.87%	0.04%
61:F	0.11%	2.55%	0.10%	0.01%	62.81%	0.11%	0.22%	1.47%	0.01%	24.30%	0.11%	0.09%	0.72%	0.01%	0.35%	3.12%	0.09%	2.69%	0.31%	0.83%
62:S	1.67%	3.40%	0.07%	0.00%	2.72%	0.13%	0.07%	0.07%	0.00%	0.38%	0.00%	0.05%	3.60%	0.00%	0.13%	85.50%	1.10%	0.14%	0.09%	0.87%
63:G	9.29%	0.44%	19.20%	0.69%	0.04%	63.05%	0.14%	0.07%	0.03%	0.07%	0.00%	0.25%	0.10%	0.01%	0.60%	1.09%	0.18%	4.60%	0.03%	0.11%
64:X	0.00%	0.00%	0.00%																	