

	A	C	D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	V	W	Y
1:E	5.69%	0.03%	6.53%	61.03%	0.03%	5.72%	0.46%	0.08%	5.19%	0.72%	0.39%	0.51%	0.49%	5.25%	0.92%	0.30%	0.48%	5.68%	0.22%	0.29%
2:V	4.97%	0.02%	0.21%	3.76%	0.36%	3.39%	0.01%	2.89%	0.56%	8.45%	6.37%	0.05%	0.29%	0.14%	0.54%	0.27%	0.88%	66.78%	0.05%	0.00%
3:Q	0.11%	0.06%	0.32%	1.42%	0.05%	0.15%	11.69%	0.13%	5.72%	3.32%	0.13%	1.17%	2.54%	66.82%	5.10%	0.26%	0.35%	0.13%	0.35%	0.19%
4:L	0.96%	0.02%	0.03%	0.56%	0.73%	0.47%	0.05%	0.91%	0.55%	67.98%	6.19%	0.03%	2.67%	0.92%	1.57%	1.27%	0.67%	14.12%	0.31%	0.01%
5:V	6.19%	0.00%	0.28%	4.26%	0.09%	3.89%	0.01%	1.60%	0.48%	8.70%	7.49%	0.02%	0.36%	0.13%	0.47%	0.19%	0.93%	64.88%	0.03%	0.00%
6:E	5.73%	0.00%	3.77%	71.18%	0.01%	8.25%	0.17%	0.03%	4.32%	0.27%	0.30%	0.00%	0.22%	0.24%	1.88%	0.47%	0.10%	0.54%	2.46%	0.03%
7:S	1.97%	2.20%	0.03%	0.00%	2.22%	0.06%	0.06%	0.07%	0.00%	0.33%	0.00%	0.04%	4.51%	0.00%	0.10%	85.79%	1.79%	0.08%	0.07%	0.65%
8:G	0.69%	0.02%	0.17%	2.90%	0.00%	91.29%	0.00%	0.00%	0.09%	0.06%	0.03%	0.01%	0.03%	0.07%	2.94%	0.06%	0.06%	0.73%	0.85%	0.00%
9:G	2.63%	0.02%	0.47%	7.86%	0.00%	60.85%	0.03%	0.34%	0.80%	0.29%	0.03%	0.07%	0.28%	0.18%	20.74%	3.23%	1.27%	0.89%	0.02%	0.00%
10:G	11.23%	0.56%	27.69%	0.88%	0.09%	49.43%	0.34%	0.24%	0.06%	0.16%	0.02%	0.43%	0.36%	0.02%	0.70%	0.88%	0.60%	6.10%	0.03%	0.18%
11:L	0.15%	0.19%	0.00%	0.04%	3.79%	0.08%	0.01%	0.19%	0.02%	81.94%	0.87%	0.00%	0.60%	0.12%	0.84%	6.64%	0.09%	1.27%	3.14%	0.02%
12:V	7.32%	0.01%	0.82%	7.61%	0.43%	6.10%	0.05%	15.64%	1.23%	16.99%	2.53%	0.14%	1.31%	0.46%	1.52%	0.92%	2.16%	34.74%	0.02%	0.01%
13:K	0.51%	0.01%	0.51%	10.63%	0.01%	1.03%	0.22%	0.44%	51.91%	1.01%	5.54%	0.94%	0.41%	9.05%	11.88%	0.36%	4.20%	0.94%	0.36%	0.04%
14:P	4.22%	0.33%	0.05%	0.01%	0.34%	0.10%	0.50%	0.15%	0.02%	1.43%	0.01%	0.13%	74.70%	0.07%	1.14%	11.05%	5.44%	0.22%	0.03%	0.07%
15:G	0.50%	0.01%	0.10%	2.27%	0.00%	92.42%	0.00%	0.00%	0.08%	0.05%	0.03%	0.00%	0.02%	0.06%	2.95%	0.05%	0.04%	0.56%	0.85%	0.00%
16:G	1.73%	0.02%	0.37%	6.16%	0.00%	85.17%	0.02%	0.02%	0.48%	0.12%	0.12%	0.03%	0.12%	0.23%	2.97%	0.13%	0.19%	1.62%	0.51%	0.00%
17:S	2.40%	2.81%	0.11%	0.01%	2.44%	0.09%	0.16%	0.09%	0.01%	0.52%	0.00%	0.16%	5.45%	0.00%	0.12%	83.00%	1.16%	0.12%	0.09%	1.26%
18:L	0.14%	0.03%	0.03%	0.01%	1.13%	0.03%	1.41%	0.50%	0.00%	77.05%	0.07%	0.02%	16.33%	0.34%	1.35%	0.29%	0.17%	1.09%	0.00%	0.02%
19:R	0.17%	0.08%	0.03%	0.28%	0.01%	6.53%	0.01%	0.63%	1.78%	0.16%	0.06%	0.17%	0.11%	0.09%	86.47%	1.78%	1.47%	0.09%	0.08%	0.00%
20:L	0.21%	0.11%	0.06%	0.01%	3.28%	0.08%	1.47%	1.09%	0.01%	80.40%	0.06%	0.08%	6.67%	0.08%	1.79%	0.25%	0.14%	4.17%	0.01%	0.04%
21:S	3.10%	1.94%	0.09%	0.00%	2.07%	0.10%	0.22%	0.07%	0.01%	0.74%	0.00%	0.09%	8.41%	0.01%	0.17%	80.05%	1.36%	0.17%	0.10%	1.29%
22:C	0.19%	64.56%	0.29%	0.02%	4.13%	2.32%	0.86%	0.12%	0.02%	0.99%	0.00%	0.35%	0.64%	0.04%	5.13%	11.75%	0.24%	0.10%	2.71%	5.51%
23:A	79.65%	0.01%	0.28%	3.30%	0.02%	0.89%	0.01%	0.58%	0.18%	0.37%	0.05%	0.03%	2.76%	0.05%	0.19%	3.63%	7.01%	0.99%	0.01%	0.01%
24:A	73.92%	0.05%	5.31%	0.36%	0.19%	4.06%	0.04%	0.49%	0.02%	0.49%	0.03%	0.13%	1.40%	0.01%	0.05%	0.70%	2.24%	10.44%	0.00%	0.05%
25:S	1.62%	3.20%	0.07%	0.01%	2.41%	0.15%	0.11%	0.07%	0.00%	0.62%	0.00%	0.05%	5.98%	0.01%	0.17%	83.27%	1.16%	0.16%	0.09%	0.83%
26:G	5.42%	0.03%	1.55%	12.46%	0.02%	70.06%	0.06%	0.25%	0.68%	0.29%	0.03%	0.11%	0.38%	0.33%	5.11%	0.29%	0.78%	2.14%	0.02%	0.02%
27:F	0.16%	2.60%	0.10%	0.01%	63.14%	0.16%	0.24%	1.57%	0.01%	22.86%	0.09%	0.11%	0.80%	0.02%	0.39%	3.74%	0.10%	2.92%	0.11%	0.87%
28:F	6.19%	0.21%	0.13%	0.01%	0.23%	0.26%	0.09%	2.84%	0.07%	20.80%	0.07%	1.34%	6.19%	0.00%	0.30%	9.24%	72.20%	0.36%	0.00%	0.06%
29:T	0.21%	3.33%	0.15%	0.01%	64.95%	0.13%	0.19%	0.74%	0.01%	0.20%	0.07%	0.09%	0.44%	0.02%	0.30%	4.26%	0.05%	2.95%	0.19%	1.14%
30:S	1.22%	2.56%	1.53%	0.17%	0.53%	3.64%	1.35%	8.48%	1.58%	0.70%	0.41%	15.61%	1.30%	0.16%	7.78%	35.68%	15.86%	0.78%	0.13%	0.55%
31:N	1.02%	0.69%	13.46%	0.96%	0.52%	1.44%	6.27%	3.16%	3.91%	0.50%	0.12%	46.55%	0.50%	0.50%	1.30%	9.36%	6.13%	0.69%	0.02%	2.90%
32:A	77.34%	0.04%	2.30%	0.07%	0.09%	2.96%	0.04%	0.35%	0.01%	0.20%	0.03%	0.09%	2.31%	0.00%	0.05%	1.76%	5.32%	7.01%	0.00%	0.02%
33:W	0.19%	6.96%	0.12%	0.49%	0.21%	13.48%	0.10%	0.01%	0.06%	1.54%	0.03%	0.03%	0.16%	0.15%	5.31%	1.67%	0.05%	0.15%	68.73%	0.55%
34:M	1.14%	0.00%	0.03%	0.71%	0.17%	0.66%	0.01%	7.03%	3.90%	10.91%	49.16%	0.14%	0.39%	0.27%	4.24%	0.50%	6.61%	13.96%	0.18%	0.00%
35:S	1.06%	1.13%	1.78%	0.19%	0.14%	4.57%	0.84%	4.82%	4.56%	0.30%	0.76%	17.96%	0.50%	0.16%	17.53%	29.56%	13.16%	0.50%	0.19%	0.28%
36:W	0.02%	3.62%	0.01%	0.03%	0.11%	2.90%	0.02%	0.00%	0.01%	0.85%	0.01%	0.01%	0.06%	0.03%	7.09%	1.08%	0.02%	0.02%	83.93%	0.18%
37:V	5.46%	0.02%	1.12%	0.08%	0.53%	2.43%	0.01%	2.37%	0.01%	1.04%	0.08%	0.04%	0.08%	0.00%	0.04%	0.09%	0.23%	86.36%	0.00%	0.01%
38:R	0.06%	3.48%	0.15%	0.01%	0.03%	1.97%	2.14%	0.01%	0.00%	0.60%	0.00%	0.06%	1.03%	0.08%	89.53%	0.56%	0.02%	0.04%	0.09%	0.14%
39:Q	0.07%	0.00%	0.02%	1.57%	0.00%	0.09%	1.32%	0.00%	1.02%	1.88%	0.05%	0.02%	5.13%	84.39%	4.19%	0.05%	0.14%	0.04%	0.02%	0.01%
40:A	46.49%	0.14%	0.54%	0.12%	0.15%	1.52%	0.05%	0.89%	0.02%	0.20%	0.02%	0.27%	12.26%	0.00%	0.15%	7.15%	28.20%	1.78%	0.00%	0.03%
41:P	1.92%	0.01%	0.00%	0.07%	0.02%	0.03%	0.30%	0.06%	0.02%	4.43%	0.01%	0.00%	88.60%	0.82%	0.92%	2.03%	0.66%	0.10%	0.00%	0.00%
42:G	11.23%	0.05%	0.67%	7.96%	0.00%	84.13%	0.01%	0.03%	0.19%	0.16%	0.11%	0.02%	0.07%	0.20%	1.86%	0.20%	0.10%	2.28%	0.26%	0.01%
43:K	0.32%	0.00%	0.07%	8.28%	0.00%	0.34%	0.06%	0.06%	74.35%	0.20%	1.03%	0.81%	0.22%	6.92%	4.47%	0.15%	2.51%	0.16%	0.03%	0.01%
44:G	0.56%	0.12%	0.31%	0.94%	0.00%	93.42%	0.01%	0.02%	0.04%	0.03%	0.02%	0.02%	0.01%	0.01%	3.08%	0.51%	0.04%	0.46%	0.39%	0.00%
45:L	0.10%	0.00%	0.00%	0.06%	0.07%	0.04%	0.06%	0.13%	0.04%	89.28%	0.56%	0.00%	4.68%	1.58%	1.66%	0.15%	0.07%	1.49%	0.03%	0.00%
46:E	5.50%	0.02%	14.32%	60.72%	0.01%	7.92%	0.40%	0.09%	3.95%	0.26%	0.25%	0.94%	0.24%	1.73%	0.45%	0.17%	0.57%	2.31%	0.03%	0.14%
47:W	0.07%	5.11%	0.02%	0.13%	0.16%	4.33%	0.02%	0.02%	0.11%	1.61%	0.06%	0.02%	0.09%	0.06%	9.29%	1.98%	0.07%	0.08%	76.59%	0.18%
48:V	2.39%	0.07%	0.71%	0.14%	2.90%	1.17%	0.14%	23.94%	0.06%	13.16%	0.51%	0.30%	1.01%	0.02%	0.18%	0.69%	2.23%	50.38%	0.00%	0.03%
49:G	1.24%	0.72%	2.75%	0.10%	0.01%	92.04%	0.04%	0.03%	0.01%	0.02%	0.00%	0.07%	0.02%	0.00%	0.83%	1.36%	0.06%	0.65%	0.03%	0.02%
50:R	0.07%	0.65%	0.10%	0.02%	0.13%	0.21%	19.93%	0.09%	0.02%	8.13%	0.00%	0.20%	20.86%	1.79%	46.76%	0.54%	0.23%	0.07%	0.03%	0.15%
51:I	1.44%	0.38%	0.44%	0.09%	10.56%	0.54%	0.32%	42.48%	0.28%	13.77%	3.58%	1.56%	1.74%	0.06%	0.97%	3.95%	7.11%	10.58%	0.03%	0.14%
52:K	0.93%	0.05%	1.78%	11.56%	0.09%	1.22%	0.97%	3.42%	44.01%	1.07%	0.57%	7.99%	0.52%	3.83%	12.87%	1.49%	6.82%	0.54%	0.03%	0.25%
53:S	0.61%	3.28%	1.36%	0.26%	0.53%	10.24%	1.19%	4.24%	2.30%	0.52%	0.20%	9.62%	0.42%	0.16%	34.63%	22.94%	5.28%	0.81%	0.27%	1.14%
54:K	0.51%	0.04%	1.00%	6.31%	0.04%	1.18%	0.76%	3.63%	49.33%	0.51%	0.55%	8.36%	0.36%	3.07%	14.61%	1.31%	7.86%	0.37%	0.01%	0.19%
55:T	3.96%	0.94%	0.70%	0.07%	1.11%	1.34%	0.85%	11.66%	0.26%	1.71%	0.25%	4.39%	3.33%	0.07%	1.18%	14.42%	51.12%	2.35%	0.02%	0.28%
56:D	2.62%	0.52%	56.85%	8.24%	0.52%	5.13%	7.27%	0.51%	0.95%	0.42%	0.02%	7.40%	0.52%	1.00%	0.65%	1.78%	0.94%	1.35%	0.01%	3.31%
57:G	5.01%	2.28%	7.82%	0.72%	0.21%	69.73%	0.66%	0.38%	0.07%	0.24%	0.01%	0.83%	0.46%	0.06%	2.82%	5.55%	0.92%	1.87%	0.06%	0.33%
58:G	2.19%	0.02%	0.24%	8.53%	0.00%	80.84%	0.01%	0.01%	0.27%	0.18%	0.09%	0.01%	0.06%	0.23%	3.49%	0.07%	0.13%	2.01%	1.59%	0.01%
59:T	3.39%	0.01%	0.02%	0.18%	0.01%	0.10%	0.01%	1.34%	1.37%	0.13%	0.15%	0.20%	3.34%	0.06%	1.59%	3.66%	84.36%	0.10%	0.00%	0.00%
60:T	10.00%	0.02%	0.34%	4.52%	0.04%	1.17%	0.05%	6.21%	3.11%	1.72%	0.81%	0.35%	11.19%	0.39%	5.62%	4.51%	48.48%	1.44%	0.01%	0.01%
61:D	1.77%	0.05%	84.26%	7.20%	0.04%	2.87%	0.70%	0.05%	0.23%	0.05%	0.01%	1.03%	0.04%	0.15%	0.06%	0.11%	0.09%	0.84%	0.00%	0.44%
62:Y	0.15%	12.17%	3.00%	0.13%	7.00%	0.75%	7.70%	0.19%	0.26%	1.60%	0.01%	3.82%	0.50%	0.30%	0.86%	8.20%	0.35%	0.13%	0.17%	52.72%
63:A	38.17%	0.29%	2.65%	0.45%	0.52%	6.38%	0.44%	1.73%	0.06%	0.95%	0.05%	0.78%	9.55%	0.03%	0.32%	7.53%	22.60%	7.36%	0.01%	0.12%
64:A	57.74%																			