

**Table S1. The three kinds of physicochemical indices for amino acids and corresponding values.**

<b>Physicochemical properties</b>	<b>Hydrophobicity</b>	<b>Hydrophilicity</b>	<b>Mass</b>
A	0.62	-0.5	71.079
R	-2.53	3	156.188
N	-0.78	0.2	114.104
D	-0.09	3	115.086
C	0.29	-1	103.145
Q	-0.85	0.2	128.131
E	-0.74	3	129.116
G	0.48	0	57.052
H	-0.4	-0.5	137.141
I	1.38	-1.8	113.160
L	1.53	-1.8	113.160
K	-1.5	3	128.170
M	0.64	-1.3	131.990
F	1.19	-2.5	147.177
P	0.12	0	97.177
S	-0.18	0.3	87.078
T	-0.05	-0.4	101.105
W	0.81	-3.4	186.123
Y	0.26	-2.3	163.176
V	1.8	-1.5	99.133