Electronic Supplementary Material (ESI) for Food & Function.
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Fig. S1. SDS-PAGE protein profiles of casein hydrolysates in different DH prepared by trypsin (A), alcalase (B), papain (C), neutrase (D) and flavourzyme (E). CN represent unhydrolyzed casein.

Fig. S2. Heat map of peptides identified from casein hydrolysates and their abundance in different DH prepared by trypsin (A). Black line represents peptides that were selected after the first step of screening. Importance of peptides on bitterness rated by RTs model in casein hydrolysates prepared by trypsin (B). Black line represents the peptides that were selected after two steps of screening.

Fig. S3. Heat map of peptides identified from casein hydrolysates and their abundance in different DH prepared by alcalase (A). Black line represents peptides that were selected after the first step of screening. Importance of peptides on bitterness rated by RTs model in casein hydrolysates prepared by trypsin (B). Black line represents the peptides that were selected after two steps of screening.

Fig. S4. Heat map of peptides identified from casein hydrolysates and their abundance in different DH prepared by papain (A). Black line represents peptides that were selected after the first step of screening. Importance of peptides on bitterness rated by RTs model in casein hydrolysates prepared by trypsin (B). Black line represents the peptides that were selected after two steps of screening.

Fig. S5. Heat map of peptides identified from casein hydrolysates and their abundance in different DH prepared by neutrase (A). Black line represents peptides that were selected after the first step of screening. Importance of peptides on bitterness rated by

RTs model in casein hydrolysates prepared by trypsin (B). Black line represents the peptides that were selected after two steps of screening.

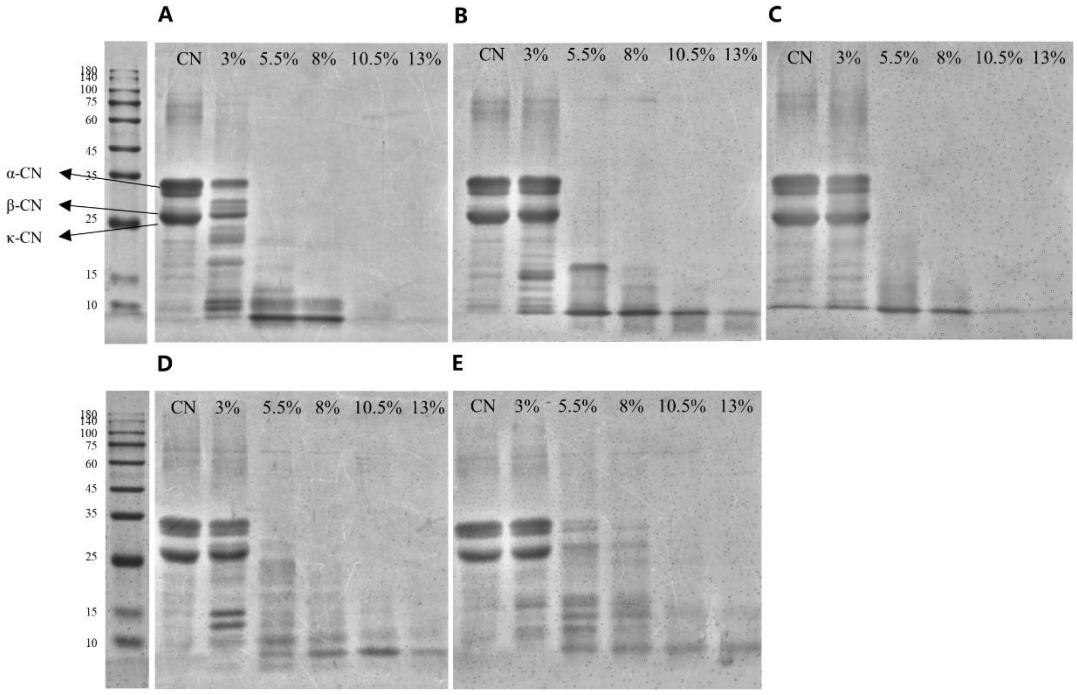
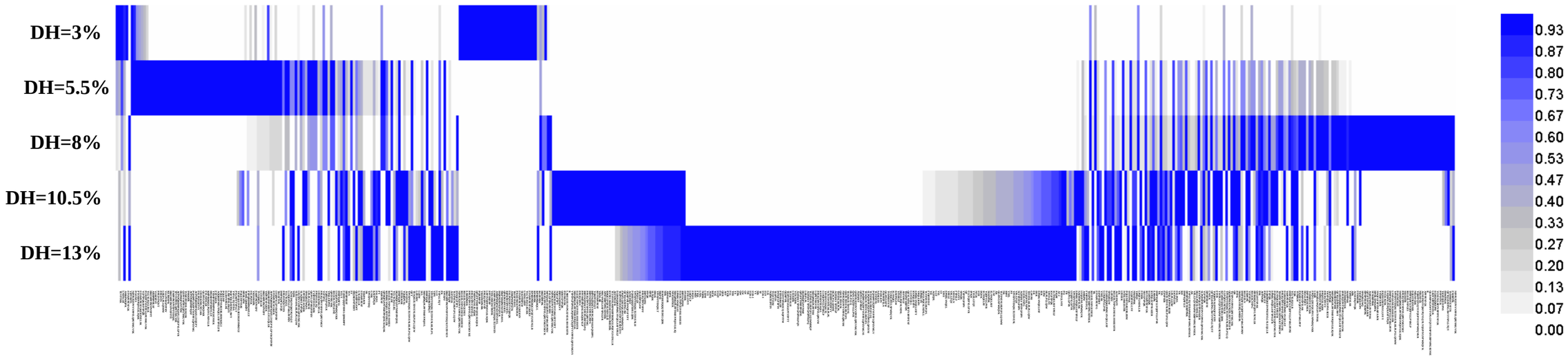


Fig. S1

A


DH=3%
DH=5.5%
DH=8%
DH=10.5%
DH=13%
0.93
0.87
0.80
0.73
0.67
0.60
0.53
0.47
0.40
0.33
0.27
0.20
0.13
0.07
0.00

B

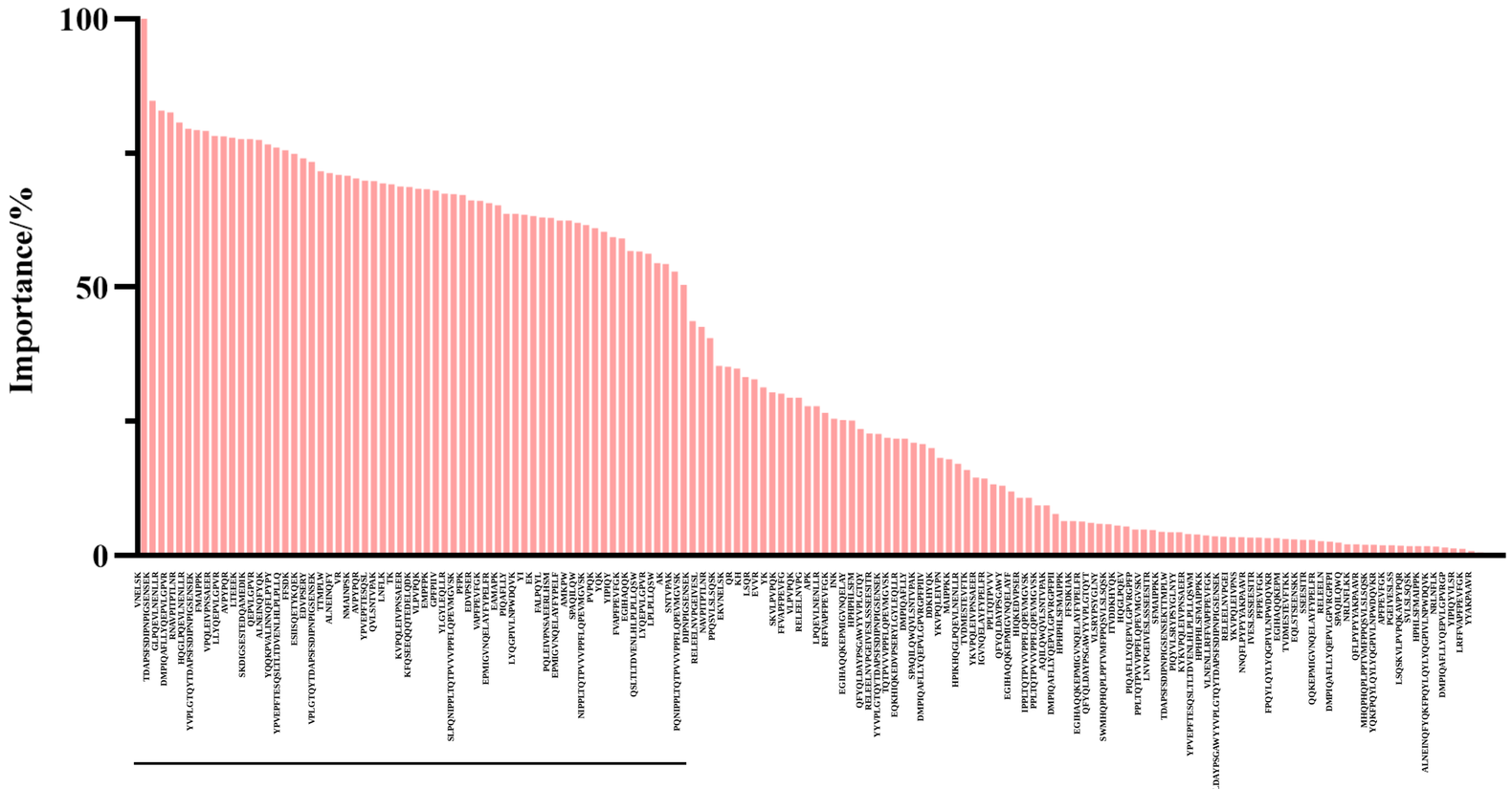

Importance/%
100
50
0

Fig. S2

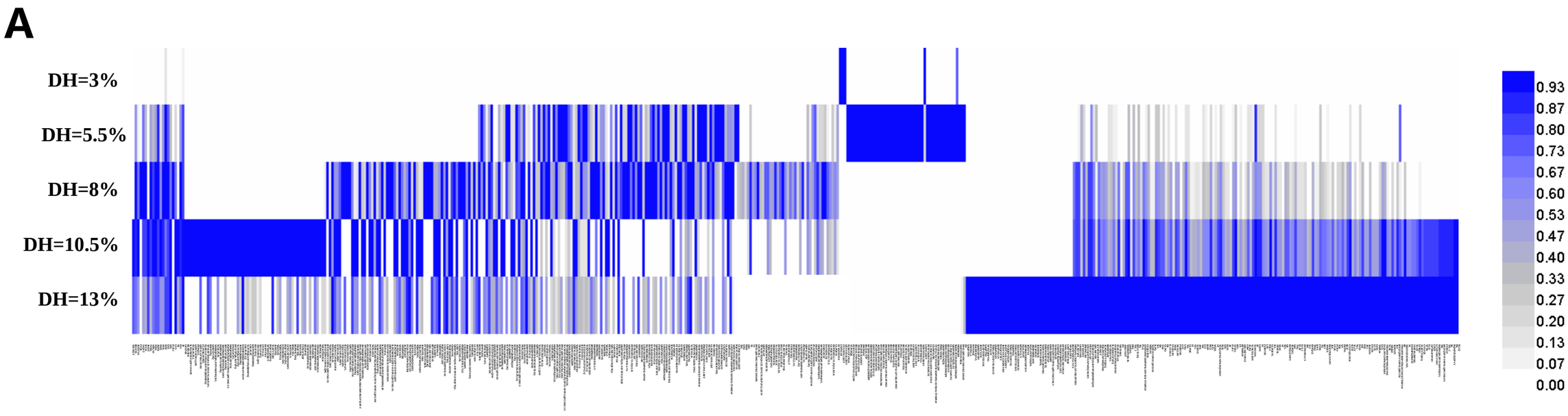
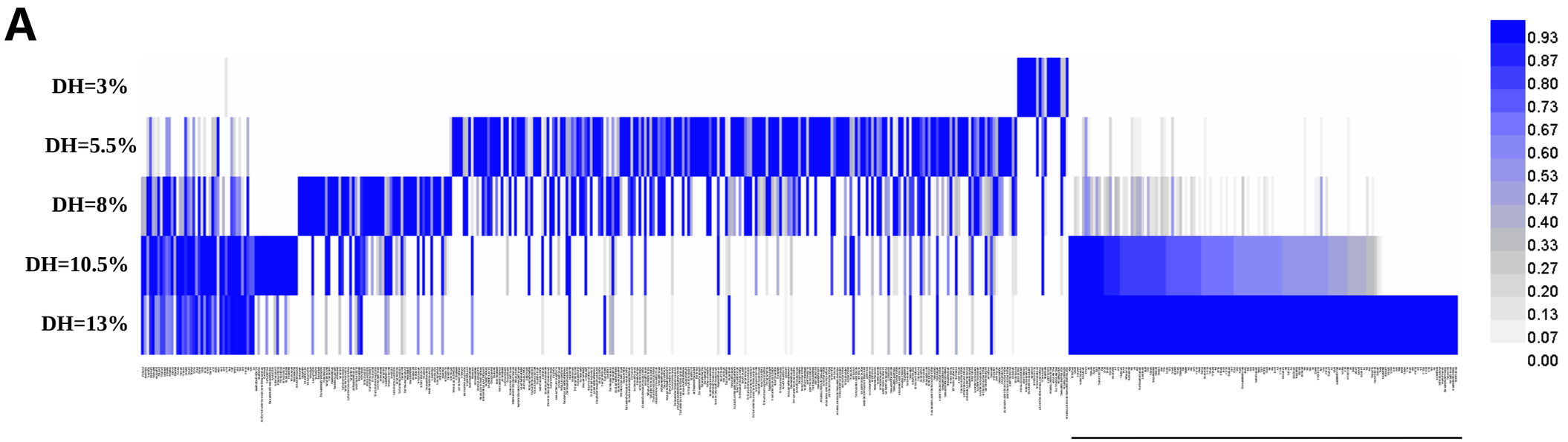

A
DH=3%
DH=5.5%
DH=8%
DH=10.5%
DH=13%
0.93
0.87
0.80
0.73
0.67
0.60
0.53
0.47
0.40
0.33
0.27
0.20
0.13
0.07
0.00
B
Importance/%
100
50
0

Fig. S3


A
DH=3%
DH=5.5%
DH=8%
DH=10.5%
DH=13%
0.93
0.87
0.80
0.73
0.67
0.60
0.53
0.47
0.40
0.33
0.27
0.20
0.13
0.07
0.00

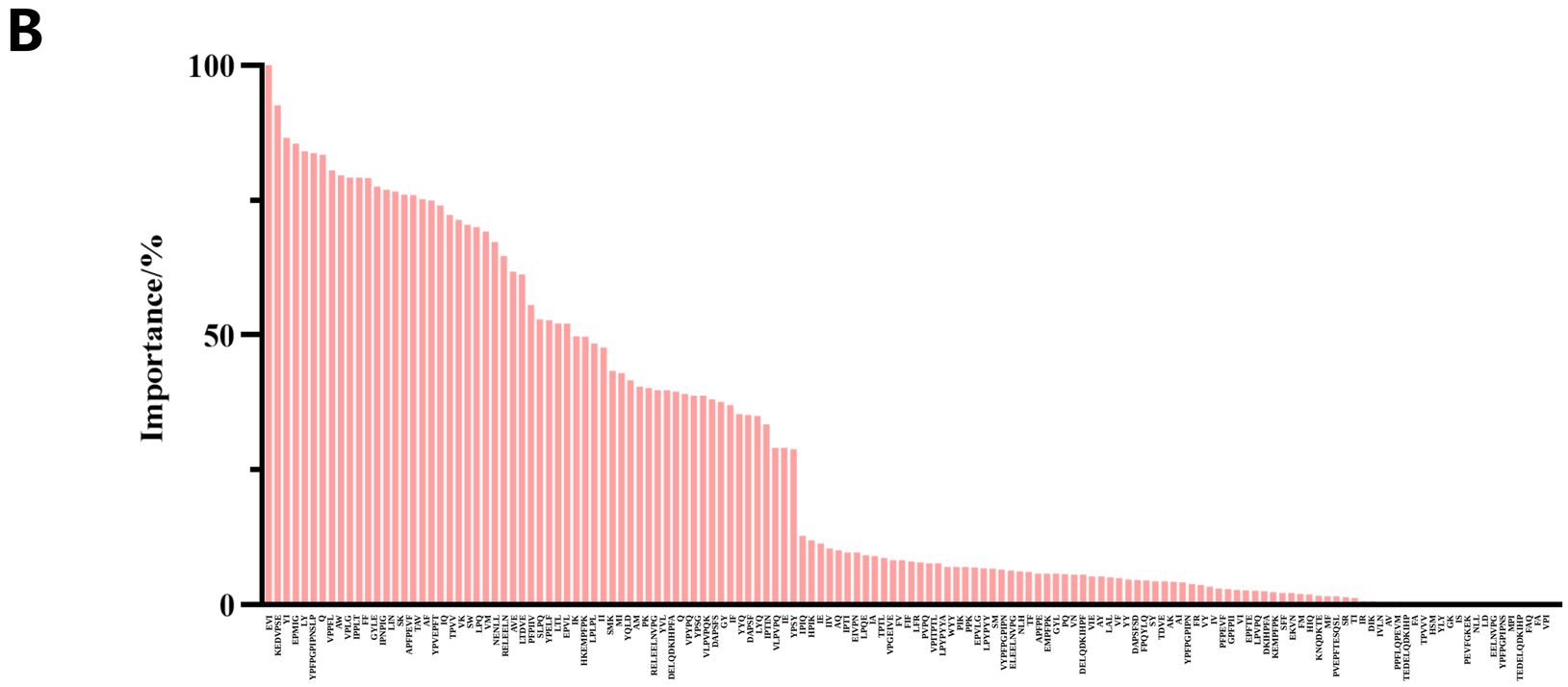
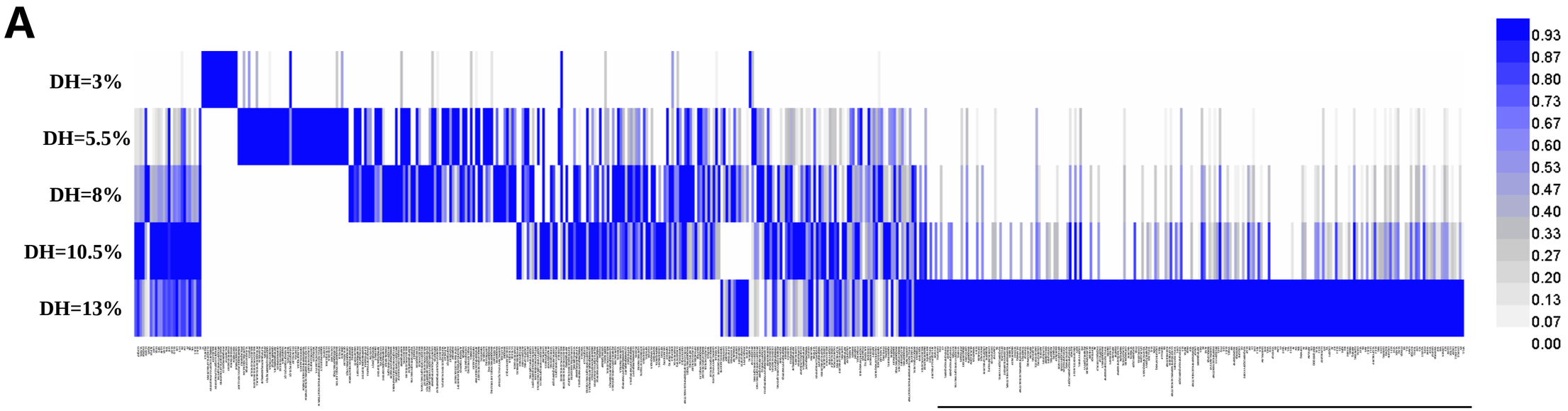

B
Importance/%
100
50
0

Fig. S4


A
DH=3%
DH=5.5%
DH=8%
DH=10.5%
DH=13%
0.93
0.87
0.80
0.73
0.67
0.60
0.53
0.47
0.40
0.33
0.27
0.20
0.13
0.07
0.00

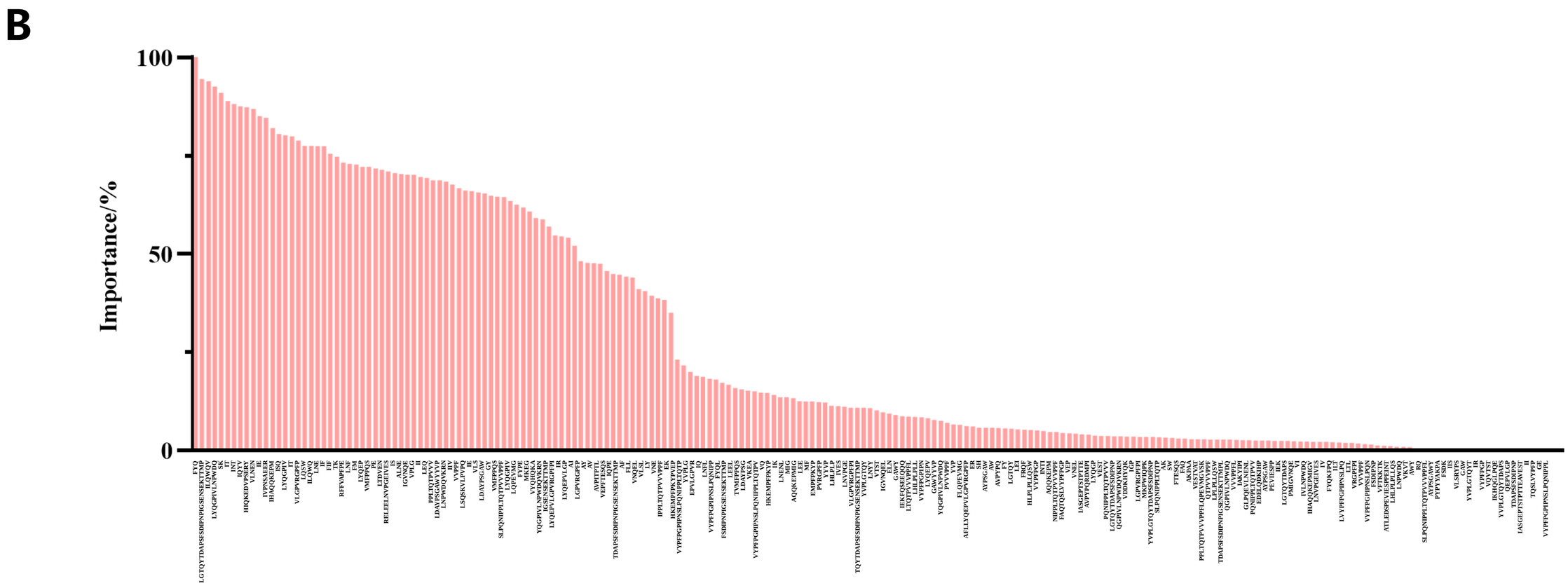

B
Importance/%
100
50
0

Fig. S5