

## Supporting Information

**Fig. S1** Cartoon illustrations of exemplar local three dimensional structures around succinylation sites. (A) Cartoon illustration of PDB:1Z45, chain A, the succinylation site (K229) and flanking non-succinylation sites (K182,K183,K186,K256) are colored red and blue, respectively. (B) Cartoon illustration of PDB:1KK9, chain A, the succinylation site (K102) and flanking non-succinylation sites (K90,K105,K115,K117) are colored red and blue, respectively. (C) Cartoon illustration of PDB:1SUR, chain A, the succinylation site (K135) and flanking non-succinylation sites (K95,K97,K101,K118,K129,K144,K177) are colored red and blue, respectively.

**Fig. S2** (A) The input page of the SuccinSite server. Users can paste and submit the query sequence into the text box for the prediction job; (B) The output page of the SuccinSite server, which provides an example output of the prediction result for the query sequence. (DOC)

**Table S1** The impact of window sizes on the performance of SuccinSite. (DOC)

**Table S2** The most 50 important CKSAAP encoding mRMR features scores and their corresponding amino acid pairs are presented. (DOC)

**Table S3** The most 50 important binary encoding mRMR features scores, positions and corresponding amino acids are presented. (DOC)

**Table S4** The most 50 important AAindex mRMR features scores, amino acids with window positions and corresponding properties are presented. (DOC)