

Legend for CIRFESS Report Column Headers

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Column Name	Source	Date Accessed (if applicable)	Reference (if applicable) and/or Weblink	Description
Accession	UniProt	Sept 13, 2019	www.uniprot.org	UniProt entry accession number
Length	UniProt	Sept 13, 2019	www.uniprot.org	Protein sequence length
SPC	SurfaceGenie	N/A	https://www.biorxiv.org/content/10.1101/575969v2 https://www.cellsurfer.net/surfacegenie	Surface Protein Consensus (SPC) score. A predictive measure of the likelihood that a protein can be present at the cell surface. This value is a sum of the number of predictive datasets for which a protein has been predicted to be localized to the cell surface. Scores range 0-4, with 4 meaning that 4 different algorithms have predicted the protein to be localized to the cell surface. SPC score and underlying datasets are described at https://www.cellsurfer.net/surfacegenie and in https://www.biorxiv.org/content/10.1101/575969v2 .
SPCstring	SurfaceGenie	N/A	https://www.biorxiv.org/content/10.1101/575969v2 https://www.cellsurfer.net/surfacegenie	SPC is based on 4 different bioinformatics predictions of the human cell surface proteome. The codes here indicate which of the 4 databases the protein is contained: BF = Bausch-Fluck D, et al. (2018) T = Town J, et al. (2016) dC = da Cunha JP, et al. (2009) DR = Diaz-Ramos MC, et al. (2011)
SigPepPhobius	Phobius	Oct 22, 2019	http://phobius.sbc.su.se/ https://www.ncbi.nlm.nih.gov/pubmed/17483518	Returns "Y" if predicted to have a signal peptide, returns "N" if not.
ScorePhobius	Phobius	Oct 22, 2019	http://phobius.sbc.su.se/ https://www.ncbi.nlm.nih.gov/pubmed/17483518	N/A – no score is reported in Phobius short output
SigPepSignalP	SignalP5-0	Oct 22, 2019	http://www.cbs.dtu.dk/services/SignalP/ https://www.ncbi.nlm.nih.gov/pubmed/30778233	Returns "Y" if predicted to have a signal peptide, returns "N" if not.
ScoreSignalP	SignalP5-0	Oct 22, 2019	http://www.cbs.dtu.dk/services/SignalP/	The score returned by the SignalP5-0 prediction algorithm.

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			https://www.ncbi.nlm.nih.gov/pubmed/30778233	
SigPepPrediSi	PrediSi	Dec 17, 2019	http://predisi.de/ https://www.ncbi.nlm.nih.gov/pubmed/15215414	Returns "Y" if predicted to have a signal peptide, returns "N" if not.
ScorePrediSi	PrediSi	Dec 17, 2019	http://predisi.de/ https://www.ncbi.nlm.nih.gov/pubmed/15215414	The score returned by the PrediSi prediction algorithm.
numSPpredictions	N/A	N/A	N/A	The total number of prediction algorithms which predicted a signal peptide.
numTMPhobius	Phobius	Oct 22, 2019	http://phobius.sbc.su.se/ https://www.ncbi.nlm.nih.gov/pubmed/17483518	Number of transmembrane domains predicted.
numICPhobius	Phobius	Oct 22, 2019	http://phobius.sbc.su.se/ https://www.ncbi.nlm.nih.gov/pubmed/17483518	Number of residues predicted to be intracellular.
numECPhobius	Phobius	Oct 22, 2019	http://phobius.sbc.su.se/ https://www.ncbi.nlm.nih.gov/pubmed/17483518	Number of residues predicted to be extracellular.
numTMTMHMM	TMHMM	Oct 22, 2019	https://services.healthtech.dtu.dk/service.php?TMHMM-2.0 https://www.ncbi.nlm.nih.gov/pubmed/11152613	Number of transmembrane domains predicted.
numICTMHMM	TMHMM	Oct 22, 2019	https://services.healthtech.dtu.dk/service.php?TMHMM-2.0 https://www.ncbi.nlm.nih.gov/pubmed/11152613	Number of residues predicted to be intracellular.
numECTMHMM	TMHMM	Oct 22, 2019	https://services.healthtech.dtu.dk/service.php?TMHMM-2.0 https://www.ncbi.nlm.nih.gov/pubmed/11152613	Number of residues predicted to be extracellular.
StringOutPhobius	Phobius	Oct 22, 2019	http://phobius.sbc.su.se/ https://www.ncbi.nlm.nih.gov/pubmed/17483518	The original string output of the predicted topology and transmembrane domains returned by Phobius.

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StringOutTMHMM	TMHMM	Oct 22, 2019	https://services.healthtech.dtu.dk/service.php?TMHMM-2.0 https://www.ncbi.nlm.nih.gov/pubmed/11152613	The original string output of the predicted topology and transmembrane domains returned by TMHMM.
numMotifsNXS	N/A	N/A	N/A	The number of times NXS (where X is any amino acid but P) appears in the protein sequence.
motifsLocNXS	N/A	N/A	N/A	The locations of the N in found NXS motifs (where X is any amino acid but P).
numMotifsNXT	N/A	N/A	N/A	The number of times NXT (where X is any amino acid but P) appears in the protein sequence.
motifsLocNXT	N/A	N/A	N/A	The locations of the N in found NXT motifs (where X is any amino acid but P).
numMotifsNXC	N/A	N/A	N/A	The number of times NXC (where X is any amino acid but P) appears in the protein sequence.
motifsLocNXC	N/A	N/A	N/A	The locations of the N in found NXC motifs (where X is any amino acid but P).
numMotifsNXV	N/A	N/A	N/A	The number of times NXV (where X is any amino acid but P) appears in the protein sequence.
motifsLocNCV	N/A	N/A	N/A	The locations of the N in found NXV motifs (where X is any amino acid but P).
numMotifsC	N/A	N/A	N/A	The number of cysteines in the protein sequence.
motifsLocC	N/A	N/A	N/A	The locations of the cysteines.
numMotifsK	N/A	N/A	N/A	The number of lysines in the protein sequence.
motifsLocK	N/A	N/A	N/A	The locations of the lysines.
numMotifsPhobiusNXS	N/A	N/A	N/A	The number of times NXS (where X is any amino acid but P) appears in the extracellular region of protein sequence predicted by Phobius.
motifsLocPhobiusNXS	N/A	N/A	N/A	The locations of the N in NXS motifs (where X is any amino acid but P) in the extracellular region of protein sequence predicted by Phobius.
numMotifsPhobiusNXT	N/A	N/A	N/A	The number of times NXT (where X is any amino acid but P) appears in the extracellular region of protein sequence predicted by Phobius.
motifsLocPhobiusNXT	N/A	N/A	N/A	The locations of the N in NXT motifs (where X is any amino acid but P) in the extracellular region of protein sequence predicted by Phobius.

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numMotifsPhobiusNXC	N/A	N/A	N/A	The number of times NXC (where X is any amino acid but P) appears in the extracellular region of protein sequence predicted by Phobius.
motifsLocPhobiusNXC	N/A	N/A	N/A	The locations of the N in NXC motifs (where X is any amino acid but P) in the extracellular region of protein sequence predicted by Phobius.
numMotifsPhobiusNXV	N/A	N/A	N/A	The number of times NXV (where X is any amino acid but P) appears in the extracellular region of protein sequence predicted by Phobius.
motifsLocPhobiusNXV	N/A	N/A	N/A	The locations of the N in NXV motifs (where X is any amino acid but P) in the extracellular region of protein sequence predicted by Phobius.
numMotifsPhobiusC	N/A	N/A	N/A	The number of cysteines in the extracellular region of protein sequence predicted by Phobius.
motifsLocPhobiusC	N/A	N/A	N/A	The locations of the cysteines in the extracellular region of protein sequence predicted by Phobius.
numMotifsPhobiusK	N/A	N/A	N/A	The number of lysines in the extracellular region of protein sequence predicted by Phobius.
motifsLocPhobiusK	N/A	N/A	N/A	The locations of the lysines in the extracellular region of protein sequence predicted by Phobius.
numMotifsTMHMMNXS	N/A	N/A	N/A	The number of times NXS (where X is any amino acid but P) appears in the extracellular region of protein sequence predicted by TMHMM.
motifsLocTMHMMNXS	N/A	N/A	N/A	The locations of the N in NXS motifs (where X is any amino acid but P) in the extracellular region of protein sequence predicted by TMHMM.
numMotifsTMHMMNXT	N/A	N/A	N/A	The number of times NXT (where X is any amino acid but P) appears in the extracellular region of protein sequence predicted by TMHMM.
motifsLocTMHMMNXT	N/A	N/A	N/A	The locations of the N in NXT motifs (where X is any amino acid but P) in the extracellular region of protein sequence predicted by TMHMM.
numMotifsTMHMMNXC	N/A	N/A	N/A	The number of times NXC (where X is any amino acid but P) appears in the extracellular region of protein sequence predicted by TMHMM.
motifsLocPhobiusNXC	N/A	N/A	N/A	The locations of the N in NXC motifs (where X is any amino acid but P) in the extracellular region of protein sequence predicted by TMHMM.
numMotifsTMHMMNXV	N/A	N/A	N/A	The number of times NXV (where X is any amino acid but P) appears in the extracellular region of protein sequence predicted by TMHMM.
motifsLocTMHMMNXV	N/A	N/A	N/A	The locations of the N in NXV motifs (where X is any amino acid but P) in the extracellular region of protein sequence predicted by TMHMM.

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numMotifsTMHMMC	N/A	N/A	N/A	The number of cysteines in the extracellular region of protein sequence predicted by TMHMM.
motifsLocTMHMMC	N/A	N/A	N/A	The locations of the cysteines in the extracellular region of protein sequence predicted by TMHMM.
numMotifsTMHMMK	N/A	N/A	N/A	The number of lysines in the extracellular region of protein sequence predicted by TMHMM.
motifsLocTMHMMK	N/A	N/A	N/A	The locations of the lysines in the extracellular region of protein sequence predicted by TMHMM.
numPepMC0	N/A	N/A	N/A	Number of peptides with 0 missed cleavages.
numPepMC1	N/A	N/A	N/A	Number of peptides with ≤ 1 missed cleavages.
numPepMC2	N/A	N/A	N/A	Number of peptides with ≤ 2 missed cleavages.
numPepOKMC0	N/A	N/A	N/A	Number of peptides with 0 missed cleavages that are length >5 and $m/z < 2000$ for z of 2 or 3.
numPepOKMC1	N/A	N/A	N/A	Number of peptides with 1 missed cleavages that are length >5 and $m/z < 2000$ for z of 2 or 3.
numPepOKMC2	N/A	N/A	N/A	Number of peptides with 2 missed cleavages that are length >5 and $m/z < 2000$ for z of 2 or 3.
numPepMC0NXS	N/A	N/A	N/A	Number of Ok for MS peptides with 0 missed cleavages that contain the N from a NXS motif (where X is any amino acid but P).
numPepMC0NXT	N/A	N/A	N/A	Number of Ok for MS peptides with 0 missed cleavages that contain the N from a NXT motif (where X is any amino acid but P).
numPepMC0NXC	N/A	N/A	N/A	Number of Ok for MS peptides with 0 missed cleavages that contain the N from a NXC motif (where X is any amino acid but P).
numPepMC0NXV	N/A	N/A	N/A	Number of Ok for MS peptides with 0 missed cleavages that contain the N from a NXV motif (where X is any amino acid but P).
numPepMC0C	N/A	N/A	N/A	Number of Ok for MS peptides with 0 missed cleavages that contain a C.
numPepMC0K	N/A	N/A	N/A	Number of Ok for MS peptides with 0 missed cleavages that contain a K.
numPepMC1NXS	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 1 missed cleavages that contain the N from a NXS motif (where X is any amino acid but P).
numPepMC1NXT	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 1 missed cleavages that contain the N from a NXT motif (where X is any amino acid but P).

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numPepMC1NXC	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 1 missed cleavages that contain the N from a NXC motif (where X is any amino acid but P).
numPepMC1NXV	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 1 missed cleavages that contain the N from a NXV motif (where X is any amino acid but P).
numPepMC1C	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 1 missed cleavages that contain a C.
numPepMC1K	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 1 missed cleavages that contain a K.
numPepMC2NXS	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 2 missed cleavages that contain the N from a NXS motif (where X is any amino acid but P).
numPepMC2NXT	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 2 missed cleavages that contain the N from a NXT motif (where X is any amino acid but P).
numPepMC2NXC	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 2 missed cleavages that contain the N from a NXC motif (where X is any amino acid but P).
numPepMC2NXV	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 2 missed cleavages that contain the N from a NXV motif (where X is any amino acid but P).
numPepMC2C	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 2 missed cleavages that contain a C.
numPepMC2K	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 2 missed cleavages that contain a K.
numPepMC0PhobiusNXS	N/A	N/A	N/A	Number of Ok for MS peptides with 0 missed cleavages that contain the N from a NXS motif (where X is any amino acid but P) in the extracellular region of protein sequence predicted by Phobius.
numPepMC0PhobiusNXT	N/A	N/A	N/A	Number of Ok for MS peptides with 0 missed cleavages that contain the N from a NXT motif (where X is any amino acid but P) in the extracellular region of protein sequence predicted by Phobius.
numPepMC0PhobiusNXC	N/A	N/A	N/A	Number of Ok for MS peptides with 0 missed cleavages that contain the N from a NXC motif (where X is any amino acid but P) in the extracellular region of protein sequence predicted by Phobius.
numPepMC0PhobiusNXV	N/A	N/A	N/A	Number of Ok for MS peptides with 0 missed cleavages that contain the N from a NXV motif (where X is any amino acid but P) in the extracellular region of protein sequence predicted by Phobius.

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numPepMC0PhobiusC	N/A	N/A	N/A	Number of Ok for MS peptides with 0 missed cleavages that contain a C in the extracellular region of protein sequence predicted by Phobius.
numPepMC0PhobiusK	N/A	N/A	N/A	Number of Ok for MS peptides with 0 missed cleavages that contain a K in the extracellular region of protein sequence predicted by Phobius.
numPepMC1PhobiusNXS	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 1 missed cleavages that contain the N from a NXS motif (where X is any amino acid but P) in the extracellular region of protein sequence predicted by Phobius.
numPepMC1PhobiusNXT	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 1 missed cleavages that contain the N from a NXT motif (where X is any amino acid but P) in the extracellular region of protein sequence predicted by Phobius.
numPepMC1PhobiusNXC	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 1 missed cleavages that contain the N from a NXC motif (where X is any amino acid but P) in the extracellular region of protein sequence predicted by Phobius.
numPepMC1PhobiusNXV	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 1 missed cleavages that contain the N from a NXV motif (where X is any amino acid but P) in the extracellular region of protein sequence predicted by Phobius.
numPepMC1PhobiusC	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 1 missed cleavages that contain a C in the extracellular region of protein sequence predicted by Phobius.
numPepMC1PhobiusK	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 1 missed cleavages that contain a K in the extracellular region of protein sequence predicted by Phobius.
numPepMC2PhobiusNXS	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 2 missed cleavages that contain the N from a NXS motif (where X is any amino acid but P) in the extracellular region of protein sequence predicted by Phobius.
numPepMC2PhobiusNXT	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 2 missed cleavages that contain the N from a NXT motif (where X is any amino acid but P) in the extracellular region of protein sequence predicted by Phobius.
numPepMC2PhobiusNXC	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 2 missed cleavages that contain the N from a NXC motif (where X is any amino acid but P) in the extracellular region of protein sequence predicted by Phobius.
numPepMC2PhobiusNXV	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 2 missed cleavages that contain the N from a NXV motif (where X is any amino acid but P) in the extracellular region of protein sequence predicted by Phobius.
numPepMC2PhobiusC	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 2 missed cleavages that contain a C in the extracellular region of protein sequence predicted by Phobius.

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numPepMC2PhobiusK	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 2 missed cleavages that contain a K in the extracellular region of protein sequence predicted by Phobius.
numPepMC0TMHMMNXS	N/A	N/A	N/A	Number of Ok for MS peptides with 0 missed cleavages that contain the N from a NXS motif (where X is any amino acid but P) in the extracellular region of protein sequence predicted by TMHMM.
numPepMC0TMHMMNXT	N/A	N/A	N/A	Number of Ok for MS peptides with 0 missed cleavages that contain the N from a NXT motif (where X is any amino acid but P) in the extracellular region of protein sequence predicted by TMHMM.
numPepMC0TMHMMNXC	N/A	N/A	N/A	Number of Ok for MS peptides with 0 missed cleavages that contain the N from a NXC motif (where X is any amino acid but P) in the extracellular region of protein sequence predicted by TMHMM.
numPepMC0TMHMMNXV	N/A	N/A	N/A	Number of Ok for MS peptides with 0 missed cleavages that contain the N from a NXV motif (where X is any amino acid but P) in the extracellular region of protein sequence predicted by TMHMM.
numPepMC0TMHMMC	N/A	N/A	N/A	Number of Ok for MS peptides with 0 missed cleavages that contain a C in the extracellular region of protein sequence predicted by TMHMM.
numPepMC0TMHMMK	N/A	N/A	N/A	Number of Ok for MS peptides with 0 missed cleavages that contain a K in the extracellular region of protein sequence predicted by TMHMM.
numPepMC1TMHMMNXS	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 1 missed cleavages that contain the N from a NXS motif (where X is any amino acid but P) in the extracellular region of protein sequence predicted by TMHMM.
numPepMC1TMHMMNXT	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 1 missed cleavages that contain the N from a NXT motif (where X is any amino acid but P) in the extracellular region of protein sequence predicted by TMHMM.
numPepMC1TMHMMNXC	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 1 missed cleavages that contain the N from a NXC motif (where X is any amino acid but P) in the extracellular region of protein sequence predicted by TMHMM.
numPepMC1TMHMMNXV	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 1 missed cleavages that contain the N from a NXV motif (where X is any amino acid but P) in the extracellular region of protein sequence predicted by TMHMM.
numPepMC1TMHMMC	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 1 missed cleavages that contain a C in the extracellular region of protein sequence predicted by TMHMM.
numPepMC1TMHMMK	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 1 missed cleavages that contain a K in the extracellular region of protein sequence predicted by TMHMM.

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numPepMC2TMHMMNXS	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 2 missed cleavages that contain the N from a NXS motif (where X is any amino acid but P) in the extracellular region of protein sequence predicted by TMHMM.
numPepMC2TMHMMNXT	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 2 missed cleavages that contain the N from a NXT motif (where X is any amino acid but P) in the extracellular region of protein sequence predicted by TMHMM.
numPepMC2TMHMMNXC	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 2 missed cleavages that contain the N from a NXC motif (where X is any amino acid but P) in the extracellular region of protein sequence predicted by TMHMM.
numPepMC2TMHMMNXV	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 2 missed cleavages that contain the N from a NXV motif (where X is any amino acid but P) in the extracellular region of protein sequence predicted by TMHMM.
numPepMC2TMHMMC	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 2 missed cleavages that contain a C in the extracellular region of protein sequence predicted by TMHMM.
numPepMC2TMHMMK	N/A	N/A	N/A	Number of Ok for MS peptides with ≤ 2 missed cleavages that contain a K in the extracellular region of protein sequence predicted by TMHMM.