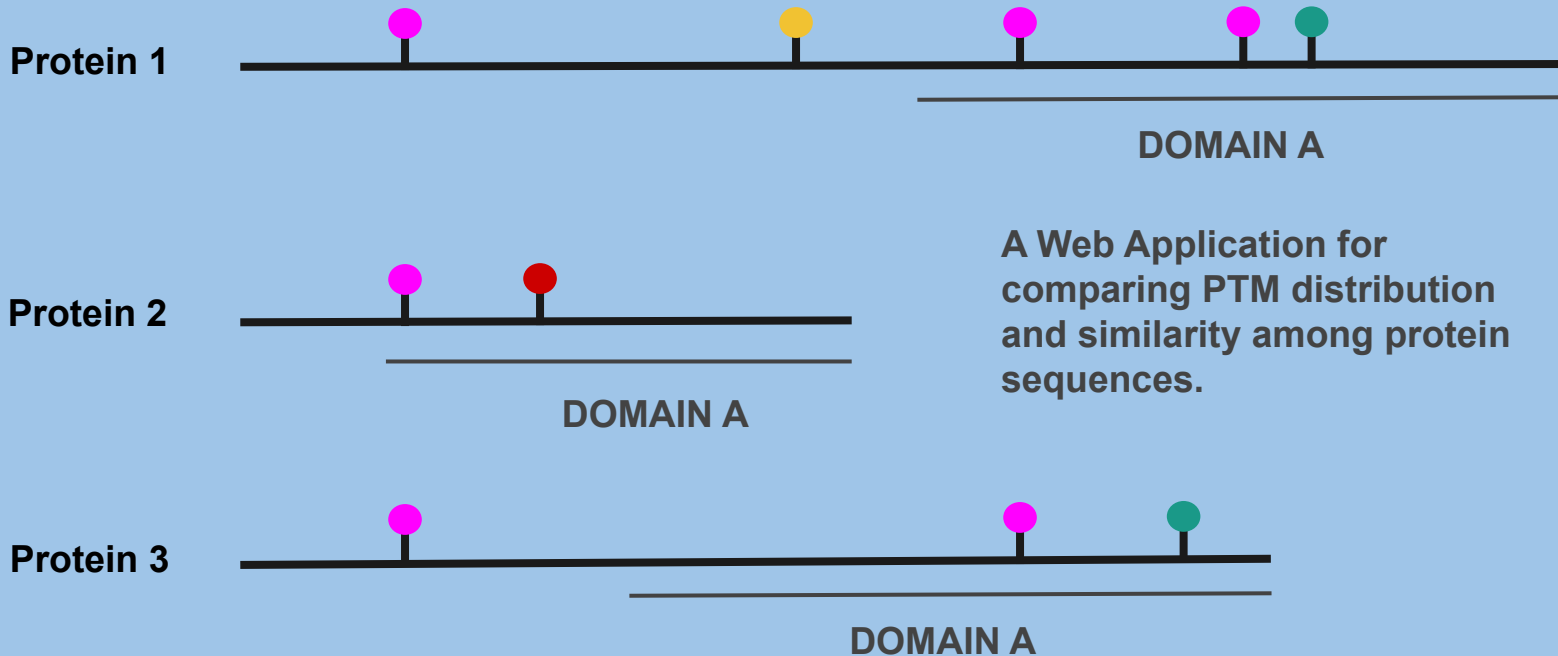


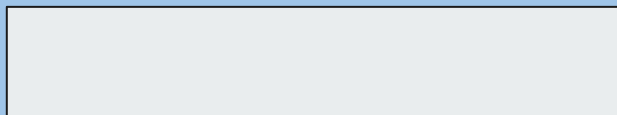
Databases and Web Development Project: PTM NEXUS

Authors: Mainer Fernandez de Mendiola, Karim Hamed, Adam Marti, Nuria Montalà

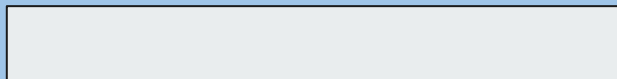
WHY?



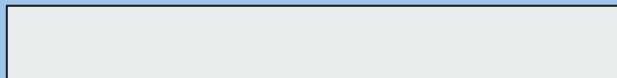
WHAT?



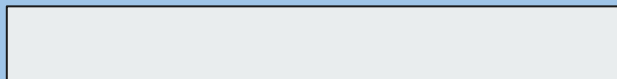
PROTEIN NAMES



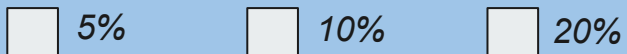
PTM



DOMAIN



RESIDUE



RANGE



ORGANISM

HOW?

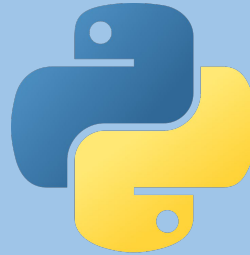


Retrieve data:

- Protein name
- PTM
- Residue
- Domain
- Position
- Organism



Data processing and Calculations



Return Final Results to the User



PTM/Processing¹

Features
Showing features for initiator methionine¹, modified residue¹, glycosylation¹, chain¹, modified residue (large scale data)¹, peptide¹.

Download

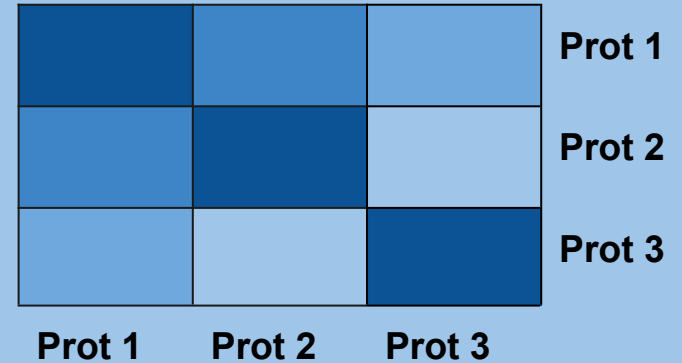
2 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420 440 460 480 500 520 540 560 580 600 620 640 660 680 700 720 740 760 780 800 820 840 860 880 900 920 940 960 980 1000

HVHCTPEKSAVYEAALWGVKVVNDEVGCEAEACRLVYVYPTKRFESFGDLSTPBARHGRKXKXKXGKVEVCAFSDLAHEQNLKCFATSELCXCKLHNDPFRFLRQVVEVLAHHEGKCFTPVQGAAYKVAARVAKLARKYR

±	TYPE	ID	POSITION(S)	SOURCE	DESCRIPTION
+	Initiator methionine		1	UniProt	Removed By Similarity 1 Publication
+	Modified residue		2	UniProt	N-acetylvaline By Similarity
+	Modified residue		2	UniProt	N-pyruvate 2-iminyl-valine; in Hb A1b
+	Glycosylation		2	UniProt	N-linked (Glc) (glycosylation) valine; in Hb A1c 1 Publication
+	Chain	PRO_000052976	2-147	UniProt	Hemoglobin subunit beta Tools Add
+	Modified residue (large scale data)		5	PRIDE	Phosphothreonine Combined Sources
+	Glycosylation		9	UniProt	N-linked (Glc) (glycosylation) lysine 1 Publication
+	Modified residue		10	UniProt	Phosphoserine Combined Sources

RESULT

	Jaccard Index	Modified residues
Protein 1 : Protein 2	0.9	K23Me:K28Me
Protein 1 : Protein 3	0.4	L21Me:L16Me
Protein 2 : Protein 3	0.2	T13Ac:S18Ac



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