

## Assignment 1: Bio-centric

By running BLAST nucleotide to protein sequence :

Get the FASTA complete sequence of

**cyclic AMP-dependent transcription factor ATF-2 isoform 1 [Homo sapiens]**

**>XP\_006742185.1 cyclic AMP-dependent transcription factor ATF-2 isoform X1 [Leptonychotes weddellii]**

**MKFKLHVNSA**RQYKDLWNMSDDKPFLCTAPGCGQRFTNEDHLAVHKHKHEM  
TLKFGPARND SVIVADQTPTPTRFLKNCE  
EVGLFNELASPFENEFFKKASEDDIKKMPLDLSPLATPIIRSKIEEPSVVETTHQD  
SPLPHPESTTSDEKEVPLAQTAQPT  
SAIVRPASLQVPNVLLTSSDSSVIIQQAVPSPTSSTVITQAPSSNRPIVPVPGPF  
PLLLHLPNGQTMPVAIPASITSSNV  
HVPAAVPLVRPVTMVPSVPGIPGPSSPQPVQSEAKMRLKAALTQQHPPVTNG  
DTVKGHGSGLVRTQSEESRPQSLQQPAT  
STTETPASPAHTTPQTQNTSGRRRRRAANEDPDEKRRKFLERNRAAASRCRQK  
RKVWVQSLEKKAEDLSSLNGQLQSEVTL  
LRNEVAQLKQLLLAHKDCPVTAMQKKSGYHTADKDDSSDLSVPSSPHTEAIQ  
HSSVSTSNGVSSTS KAEAVATSVLTQM  
ADQSTEPALSQIAMAPASQSQPSGS

Now, classify the protein sequence by using InterProScan and the results are:

1st protein : **MKFKLHVNSA**

2nd protein: **RQYKDLWNMS**

Last protein: **QPSGS**

So, the N-terminal domain is: **MKFKLHVNSA**

And C-terminal domain is: **QPSGS**