1. Scan the mouse Transforming growth factor beta-1 precursor (TGF-beta-1) protein sequence (P04202) against all profiles and patterns in PROSITE using ScanProsite. How many hits were found to this sequence? How many of these had a high frequency of occurrence? From the results page, how would you access information about the TGF-beta family profile?

   26 hits found in 1 sequence.
   1 hit by 1 pattern, 1 hit by 1 profile.

   Click PS51362 to find TGF-beta family profile.

2. How would you scan the human and mouse TGF-beta receptor type-2 precursor sequences (P37173 and Q62312) against the Protein kinases ATP-binding region signature? Where does this pattern hit on both the mouse and human sequences?

   Enter both of accession numbers into the scanned sequence area

   It hits human sequences on A.A. 250-277 and mouse sequences on A.A. 275-302.

3. Using MyDomains, create a domain figure for a 500 amino acid protein sequence. The sequence shows the presence of a WH2 domain from amino acids 53 to 78, a tyrosine phosphorylation site at position 132, and a GRIP domain from amino acids 436 to 453.

   Consider it done.