

Bioinformatic Lab Notebook

1: Find the most consistent translation of the cDNA. Paste here the 6 resulting reading frames, and select the consistent (✓) / not consistent (✗) frames.

Frame	Resulting protein	✓ / ✗
1		
2		
3		
-1		
-2		
-3		

2 and 3: Find homologous genes in Mouse and get informations about its biological function in mouse. Copy the relevant informations.

		Consistent with a role in neurodegeneration?
Name of the homologous gene in <i>Mus musculus</i> and imatge of the 3D structure of the protein.		
Described functions of this gene.		
Expression pattern in <i>Mus musculus</i> .		

4) Write your conclusion:

	The human gene.....,
DATA	Is homologous to... / Expression patterns / Attributed functions.....
CONCEPTUAL FRAME / MODEL	<p>As...</p> <ul style="list-style-type: none"> <input type="checkbox"/> Some genes are conserved between species through evolution. When they conserve both its structure (sequence patterns) and function, we call it homologous genes. <input type="checkbox"/> Studying homologous genes in other animals can bring us information about these genes in humans. <input type="checkbox"/> Gene function is coherent with its expression pattern. Genes with an expression pattern associated to neurologic tissues -brain, nerves- are more likely to play a specific role in neurodegeneration.
HYPOTHESIS (preliminary conclusion)	<p>So, we consider that the human gene.....</p> <p>is a <input type="checkbox"/> good / <input type="checkbox"/> bad candidate to play a role in neurodegeneration.</p>