

# Find-a-gene Project

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**Q1. Tell me the name of a protein you are interested in. Include the species and the accession number. This can be a human protein or a protein from any other species as long as its function is known.**

If you do not have a favorite protein, select human RBP4 or KIF11. Do not use beta globin as this is in the worked example report that I provide you with online.

Protein: CLOCK

Accession number: NP\_004489.1

Species: Homo sapiens

Function known: Encodes a protein that plays a central role in the regulation of circadian rhythms—a transcription factor of the basic helix-loop-helix (bHLH) family, containing DNA binding histone acetyltransferase activity. May be associated with behavioral changes in certain populations, and with obesity and metabolic syndrome.

**Q2. Perform a BLAST search against a DNA database, such as a database consisting of genomic DNA or ESTs. The BLAST server can be at NCBI or elsewhere. Include details of the BLAST method used, database searched and any limits applied (e.g. Organism).**

Method: TBLASTN (2.71.1) search against nematode ESTs

Database: Expressed sequence tags (est)

Organism: Nematodes (Taxid: 6231)