## Q1 RBP4

### retinol binding protein 4

Acession number: KAI6070658.1 (Can't find a reference ID from NIBH, This is from genbank)

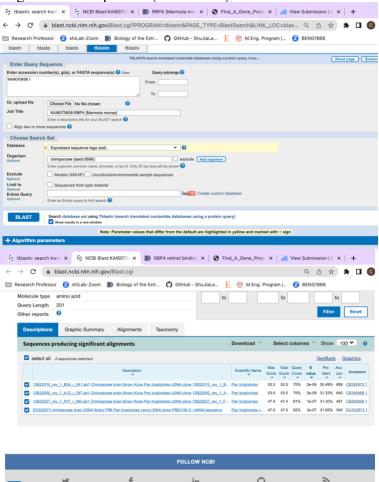
Species: Homo Sapiens

Function: The protein belongs to lipocalin family and is the specific carrier for retinol (vitamin A alcohol) in the blood. It will bind to retinol, and deliver retinol from liver to the surrounding tissues.

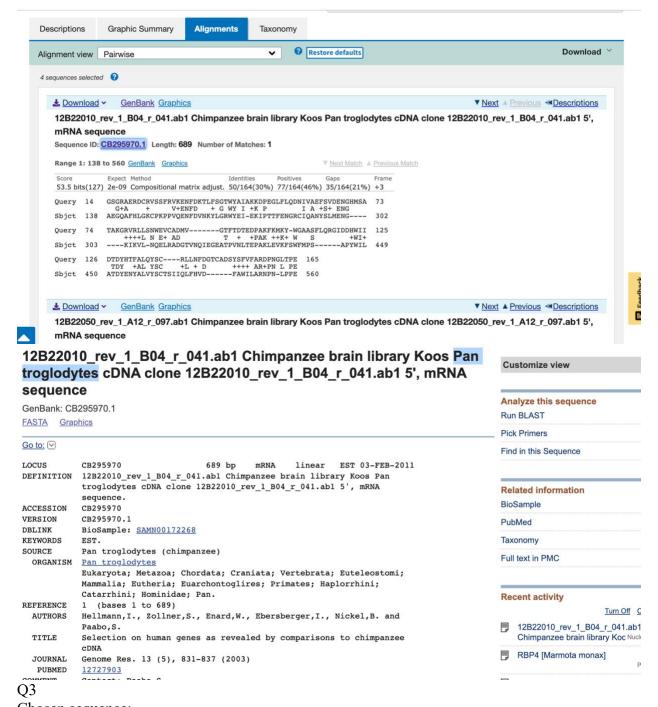
## Q2:

Method: TBLASTN against Chimpanzee EST

Database: Expressed sequence tags Organism: chimpanzee (taxid:9598)



Chosen match: CB295970.1, A 689 base pair clone from chimpanzee brain library Pan trogglodytes. See below for more details



## Chosen sequence:

Using EMBOSS Transeq and identify the reading frame with same AA sequence on the alignment page, we result in the following AA sequence.

#### > chimpanzee protein

ASQIG\*FCIWKLPSS\*KKRSLLQPPSPKMVMLLLLFSALAGLFGAAEGQAFHLGKCPKPP VQENFDVNKYLGRWYEIEKIPTTFENGRCIQANYSLMENGKIKVLNQELRADGTVNQIE

EATPVNLTEPAKLEVKFSWFMPSAPYWILATDYENYALVYSCTSIIQLFHVDFAWILARN

#### PNLPPETVDSLKNILTSNNIDVKKMTVTDXVNCPKLS\*PGXTGRLHPLX

#### Protein name: APOD isoform 3

ORGANISM Pan troglodytes

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Haplorrhini; Catarrhini; Hominidae; Pan.

# A BLASTP search against NR database (see setup in first screen-shot below) yielded a top hit result is to a protein from Pan Troglodytes

