

Human Myoglobin Expression Plasmid

Specifications:

Gene:	Human Myoglobin
Accession:	NM_004102
Insert size:	465 bp
Size:	10 µg

Human Myoglobin

Expression Plasmid DNA

Myoglobin, also known as PVALB, is a member of the globin superfamily and is expressed in skeletal and cardiac muscles.

The encoded protein is a haemoprotein contributing to intracellular oxygen storage and transcellular facilitated diffusion of oxygen. At least three alternatively spliced transcript variants encoding the same protein have been reported.

Description

This pET28a-sumo vector contains the complete ORF for the gene of human myoglobin and high-level expression of peptide sequences fused with the 109 aa Trx•Tag thioredoxin protein. It is inserted between BamHI and XhoI sites. The gene insert is flanked with convenient multiple cloning sites which can be easily cut and transferred into other desired expression vector.

DNA (pET28a-sumo vector)

Preparation and Storage

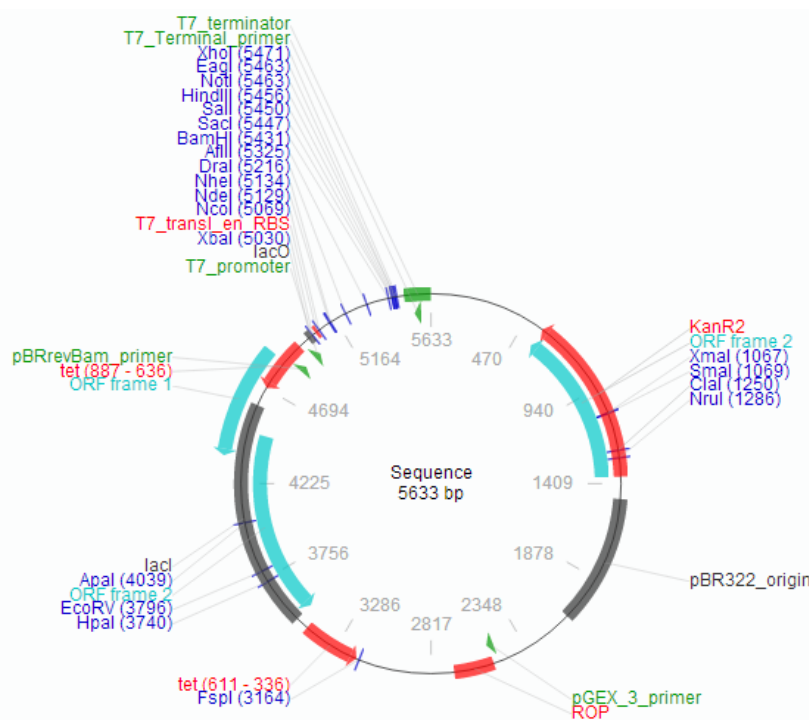
Formulation The plasmid DNA is lyophilized from 0.2 µm filtered TE buffer (10 mM Tris-Cl, pH 8.0).

Shipping Ships at ambient temperature and store at -20 °C to -80 °C

Stability 1 year from date of receipt when stored at -20 °C to -80 °C

Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

Reconstitution Reconstitute at 100 µg/mL in sterile TE buffer (10 mM Tris-Cl, pH 8.0).



> Insert DNA Sequence

```
1   ATGGGGCTCA   GCGACGGGGA   ATGGCAGTTG   GTGCTGAACG   TCTGGGGGAA
51  GGTGGAGGC    TGACATCCCA   GGCCATGGGC   AGGAAGTCCT   CATCAGGCTC
101 TTTAAGGGTC    ACCCAGAGAC   TCTGGAGAAG   TTTGACAAGT   TCAAGCACCT
151 GAAGTCAGAG    GACGAGATGA   AGGCGTCTGA   GGACTIONAAG   AAGCATGGTG
201 CCACCGTGCT    CACCGCCCTG   GGTGGCATCC   TTAAGAAGAA   GGGGCATCAT
251 GAGGCAGAGA    TTAAGCCCCT   GGCACAGTCG   CATGCCACCA   AGCACAAGAT
301 CCCCCTGAAG    TACCTGGAGT   TCATCTCGGA   ATGCATCATC   CAGGTTCTGC
351 AGAGCAAGCA    TCCCGGGGAC   TTTGGTGCTG   ATGCCCAGGG   GGCCATGAAC
401 AAGGCCCTGG    AGCTGTTCCG   GAAGGACATG   GCCTCCAACT   ACAAGGAGCT
451 GGGCTTCCAG    GGCTAG
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> Translated Insert Sequence

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MGLSDGEWQLVLNVWGKVEADIPGHGQEV LIRLFK GHPETLEKFDKFKHLKS
EDEMKA SEDLKKHGATVLTALGGILKKKGHHEAEIKPLAQSHATKHKIPVKY
LEFISECIIQVLQSKHPGDFGADAQGAMNKALELFRKDMASNYKELGFQG
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