

Datasheet for ABIN7555757

Transferrin Receptor Protein (AA 1-760) (His tag)



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3 Images

Overview

Quantity:	1 mg
Target:	Transferrin Receptor (TFRC)
Protein Characteristics:	AA 1-760
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Transferrin Receptor protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant TFRC Protein expressed in mammalian cells.
Sequence:	<p>MMDQARSAFS NLFGGEPLSY TRFSLARQVD GDNHVEMKL AVDEEENADN NTKANVTKPK</p> <p>RCSGSICYGT IAVIVFFLIG FMIGYLG YCK GVEPKTECER LAGTESPVRE EPGEDFPAAR</p> <p>RLYWDDLK RK LSEKLDSTDF TGTIKLLNEN SYVPREAGSQ KDENLALYVE NQFREFKLSK</p> <p>VWRDQH FVKI QVKDS AQNSV IIVDKNGRLV YLVENPGGYV AYSKAATVTG KLVHANFGTK</p> <p>KDFEDLYTPV NGSIVIVRAG KITFAEKVAN AESLNAIGVL IYMDQTKFPI VNAEL SFFGH</p> <p>AHLGTGDPYT PGFPSFNHTQ FPPSRSSGLP NIPVQTISRA AAEKLFGNME GDCPSDWKTD</p> <p>STCRMVTS ES KNVKLT VSNV LKEIKILNIF GVIKGFVEPD HYVVVGAQRD AWGP GAAKSG</p> <p>VGTALLKLA QMFSDMVLKD GFQPSRSIIF ASWSAGDFGS VGATEWLEGY LSSLHLKAFT</p> <p>YINLDKAVLG TSNFKVSASP LLYTLIEKTM QNVKHPVTGQ FLYQDSN WAS KVEKLTLDNA</p> <p>AFPFLAYSGI PAVSFCFCED TDYPYLGTTM DTYKELIERI PELNKVARAA AEVAGQFVIK</p> <p>LTHDVELNLD YERYNSQLLS FVRDLNQYRA DIKEMGLSLQ WLYSARGDFF RATSRLTTDF</p> <p>GNAEKTDRFV MKKLNDRV MR VEYHFLSPYV SPKESPFRHV FWGSGSHTLP ALLENLKL RK</p>

Product Details

QNNGAFNETL FRNQLALATW TIQGAANALS GDVWDIDNEF **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**

Specificity: If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.

Characteristics: **Key Benefits:**

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity: > 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade: custom-made

Target Details

Target: Transferrin Receptor (TFRC)

Alternative Name: TFRC ([TFRC Products](#))

Background: Transferrin receptor protein 1 (TR) (TfR) (TfR1) (Trfr) (T9) (p90) (CD antigen CD71) [Cleaved into: Transferrin receptor protein 1, serum form (sTfR)],FUNCTION: Cellular uptake of iron occurs via receptor-mediated endocytosis of ligand-occupied transferrin receptor into specialized endosomes (PubMed:26214738). Endosomal acidification leads to iron release. The apotransferrin-receptor complex is then recycled to the cell surface with a return to neutral pH and the concomitant loss of affinity of apotransferrin for its receptor. Transferrin receptor is necessary for development of erythrocytes and the nervous system (By similarity). A second

Target Details

ligand, the heditary hemochromatosis protein HFE, competes for binding with transferrin for an overlapping C-terminal binding site. Positively regulates T and B cell proliferation through iron uptake (PubMed:26642240). Acts as a lipid sensor that regulates mitochondrial fusion by regulating activation of the JNK pathway (PubMed:26214738). When dietary levels of stearate (C18:0) are low, promotes activation of the JNK pathway, resulting in HUWE1-mediated ubiquitination and subsequent degradation of the mitofusin MFN2 and inhibition of mitochondrial fusion (PubMed:26214738). When dietary levels of stearate (C18:0) are high, TFRC stearylation inhibits activation of the JNK pathway and thus degradation of the mitofusin MFN2 (PubMed:26214738). {ECO:0000250, ECO:0000269|PubMed:26214738, ECO:0000269|PubMed:26642240, ECO:0000269|PubMed:3568132}., FUNCTION: (Microbial infection) Acts as a receptor for new-world arenaviruses: Guanarito, Junin and Machupo virus. {ECO:0000269|PubMed:17287727, ECO:0000269|PubMed:18268337}.

Molecular Weight: 84.9 kDa

UniProt: [P02786](#)

Pathways: [Transition Metal Ion Homeostasis](#)

Application Details

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

Handling

Format: Liquid

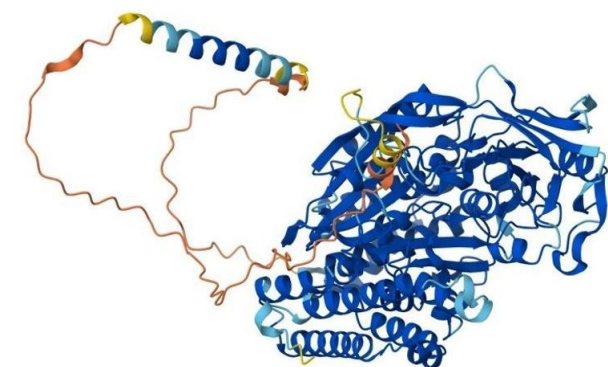
Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

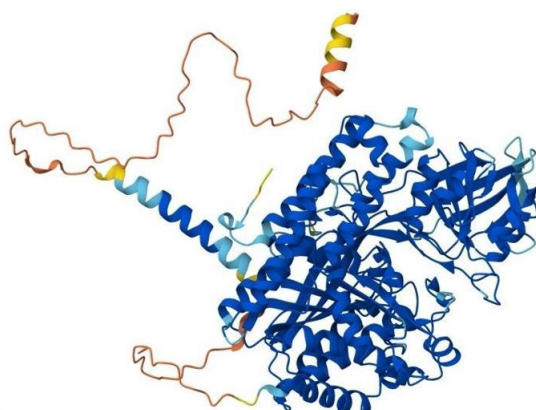
Storage Comment: Store at -80°C.

Expiry Date: 12 months



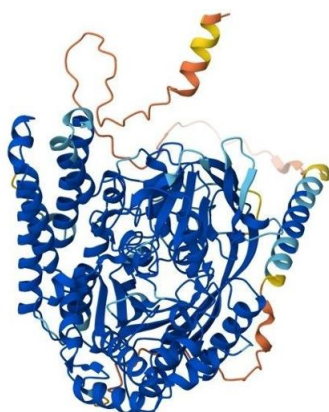
Protein Structure

Image 1. AlphaFold protein structure prediction of Human Recombinant TFRC Protein, UniprotID P02786



Protein Structure

Image 2. AlphaFold protein structure prediction of Human Recombinant TFRC Protein, UniprotID P02786



Protein Structure

Image 3. AlphaFold protein structure prediction of Human Recombinant TFRC Protein, UniprotID P02786

