

Datasheet for ABIN3135544

Transferrin Receptor Protein (AA 89-763) (His tag)**3** Images[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	Transferrin Receptor (TFRC)
Protein Characteristics:	AA 89-763
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Transferrin Receptor protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	MHHHHHHCKR VEQKEECVKL AETEETDKSE TMETEDVPTS SRLYWADLKT LLSEKLSNIE FADTIKQLSQ NTYTPREAGS QKDESLAYYI ENQFHEFKFS KVWRDEHYVK IQVKSSIGQN MVTIVQSGN LDPVESPEGY VAFSKPTEVS GKL VHANFGT KKDFEELSYS VNGSLVIVRA GEITFAEKVA NAQSFNAIGV LIYMDKNKFP VVEADLALFG HAH LGTGDPY TPGFPSFNHT QFPPSQSSGL PNIPVQTISR AAAEKLFGKM EGSCPARWNI DSSCKLELSQ NQNVKLIVKN VLKERRILNI FGVIKGYEEP DRYVVVGAQR DALGAGVAAK SSVGTGLLLK LAQVFSDMIS KDGFRPSRSI IFASWTAGDF GAVGATEWLE GYLSSLHLKA FTYINLDKVV LGTSNFKVSA SPLLYTLMGK IMQDVKHPVD GKSLYRDSNW ISKVEKLSFD NAAYPFLAYS GIPAVSFCFC EDADYPYLG TRLDTYEALTQ KVPQLNQMV R TAAEVAGQLI IKLTHDVELN LDYEMYN SKL LSFMKDLNQF KTDIRDMGLS LQWLYSARGD YFRATSRLTT DFHNAEKTNR FVMREINDRI MKVEYHFLSP YVSPRESPFR HIFWGS GSHT LSALVENLKL RQKNITAFNE TLFRNQLALA TWTIQGVANA LSGDIWNIDN EF
-----------	---

Product Details

Specificity:	N-terminal His-tag
Characteristics:	<ul style="list-style-type: none">• Made in Germany - from design to production - by highly experienced protein experts.• Mouse Tfrc Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.• State-of-the-art algorithm used for plasmid design (Gene synthesis). <p>This made-to-order protein has already been successfully produced. Please let us know if you are interested in purchasing a smaller amount of this protein. We will check our stock and make you a customized quote in case we can provide this protein in a smaller amount..</p> <p>When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.</p> <p>The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.</p> <p>The concentration of the protein is calculated using its specific absorption coefficient. We use the ExPASy's protparam tool to determine the absorption coefficient of each protein.</p>
Purification:	<p>Two step purification of proteins expressed in baculovirus infected SF9 insect cells:</p> <ol style="list-style-type: none">1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

Target:	Transferrin Receptor (TFRC)
Alternative Name:	Tfrc (TFRC Products)
Background:	Cellular uptake of iron occurs via receptor-mediated endocytosis of ligand-occupied transferrin receptor into specialized endosomes. Endosomal acidification leads to iron release. The

Target Details

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).
{ECO:0000250, ECO:0000269|PubMed:10192390}.

Molecular Weight: 76.9 kDa Including tag.

UniProt: [Q62351](#)

Pathways: [Transition Metal Ion Homeostasis](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment: Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

Restrictions: For Research Use only

Handling

Format: Liquid

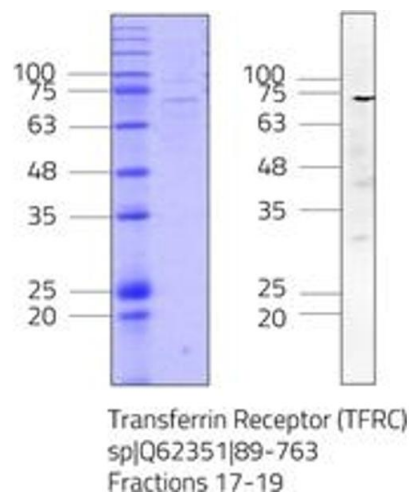
Buffer: 10 mM Hepes, pH 7.8; 400 mM NaCl, 10 % Glycerol, 5 mM BME, 2 mM EDTA

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: Unlimited (if stored properly)

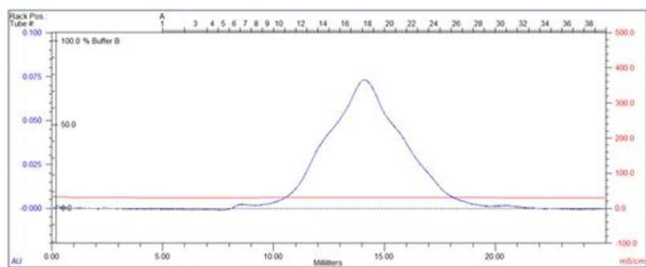


Western Blotting

Image 1.



Image 2. „Crystallography Grade“ protein due to multi-step, protein-specific purification process



Size-exclusion chromatography-High Pressure Liquid Chromatography

Image 3.