Cynomolgus / Rhesus Transferrin Receptor / TFRC / CD71 Protein (His Tag)

Catalog Number: 90253-C07H

Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

TFRC

Protein Construction:

A DNA sequence encoding the cynomolgus/rhesus TFRC (XP_005545315.1/NP_001244232.1) (Cys89-Phe760) was expressed with a polyhistidine tag at the N-terminus. Cynomolgus and Rhesus TFRC sequences are identical.

Source: Cynomolgus, Rhesus

Expression Host: HEK293 Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Bio Activity:

Measured by its ability to neutralize transferrin-mediated proliferation of MCF-7 cells. The ED_{50} for this effect is typically 0.2-2μg/mL.

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Predicted N terminal: His

Molecular Mass:

The recombinant cynomolgus/rhesus TFRC comprises 691 amino acids and has a calculated molecular mass of 77.5 KDa.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Stability & Storage:
Samples are stable for twelve months from date of receipt at -20℃ to -80℃.

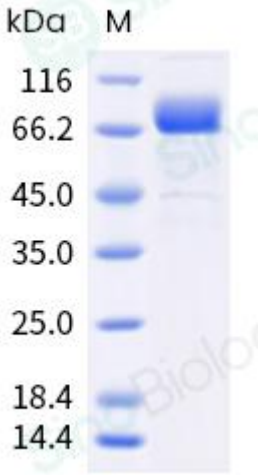
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Transferrin receptor protein 1, also known as transferrin receptor, Trfr, p9, CD71 and TFRC, is a single-pass type II membrane protein that belongs to the peptidase M28 family and M28B subfamily. TFRC / CD71 is a membrane-bound protein expressed in larger amounts in proliferating. The specific expression of TFRC can represent a diagnostic tool or a therapeutic target in solid tumours expressing this antigen. Transferrin receptor is necessary for development of erythrocytes and the nervous system. TFRC / CD71 is regulated by cellular iron levels through binding of the iron regulatory proteins, IRP1 and IRP2, to iron-responsive elements in the 3'-UTR. Up-regulated upon mitogenic stimulation. TFRC / CD71 represents a marker of malignant transformation in the pancreas that could be applied as potential diagnostic and therapeutic target.

References

1.Douabin-Gicquel V., et al., 2001,Hum. Genet. 109:393-401.
2.Ryschich,E. et al., 2004,Eur J Cancer. 40 (9):1418-22.
3.Tosoni D., et al., 2005, Cell 123:875-888.