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Product Datasheet

Recombinant Mouse TfR (N-8His)
EBT-EPT081

Article Name	Recombinant Mouse TfR (N-8His)
Biozol Catalog Number	EBT-EPT081
Supplier Catalog Number	EPT081
Alternative Catalog Number	EBT-EPT081-50
Manufacturer	ELK Biotechnology
Category	Proteine/Peptide
Product Description	Recombinant Mouse Transferrin Receptor Protein 1 is produced by our Mammalian expression system and the target gene encoding Cys89-Phe763 is expressed with a 8His tag at the N-terminus....
Molecular Weight	Molecular weight: 77 KDa. Apparent molecular weight: 90 KDa, reducing conditions
UniProt	Q62351
Purity	Greater than 95% as determined by reducing SDS-PAGE.

Application Notes	Redissolve: Always centrifuge tubes before opening.Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.. Endotoxin: Less than 0.1 ng/µg (1 EU/µg) as determined by LAL test. Background: Transferrin receptor protein 1 (TFRC) belongs to the peptidase M28 family that is synthesized as a 172 amino acid (aa). TFRC regulated by cellular iron levels through binding of the iron regulatory proteins, IRP1 and IRP2, to iron-responsive elements in the 3-UTR. It binds one transferrin or HFE molecule per subunit and binds the HLA class II histocompatibility antigen, DR1. It Interacts with SH3BP3 and STEAP3, facilitates TFRC endocytosis in erythroid precursor cells. Cellular uptake of iron occurs via receptor-mediated endocytosis of ligand-occupied transferrin receptor into specialized endosomes. 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. A second ligand, the heditary hemochromatosis protein HFE, competes for binding with transferrin for an overlapping C-terminal binding site. It positively regulates T and B cell proliferation through iron uptake