Divalent Metal Transporter 1 (DMT1) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	Divalent Metal Transporter 1 (DMT1), ELISA Kit
Full Product Name	Human Divalent Metal Transporter 1 (DMT1) ELISA Kit
Product Gene Name	DMT1 elisa kit
Species Reactivity	Human
Assay Type	Sandwich
Samples	Tissue homogenates, cell lysates and other biological fluids.
Detection Range	0.312-20ng/mL
Sensitivity	0.112ng/mL
Preparation and Storage	For unopened kit, all reagents should be kept according to the labels on vials. The TMB Substrate, Wash Buffer, Stop Solution should be stored at 4 degree C. All others should be stored at -20 degree C.
Molecular Weight	61,048 Da
OMIM	AB004857 mRNA
3D Structure	ModBase 3D Structure for P49281
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Related Product Information for DMT1 elisa kit	MBS456116 is a ready-to-use microwell, strip-or-full plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Divalent Metal Transporter 1 (DMT1) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing DMT1. The ELISA analytical biochemical technique of the MBS456116 kit is based on DMT1 antibody-DMT1 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect DMT1 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, DMT1. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).
Other Notes	Small volumes of DMT1 elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for DMT1. It may not necessarily be applicable to this product.

NCBI GI #	10835169
NCBI GeneID	4891
NCBI Accession #	NP_000608.1
UniProt Primary Accession #	P49281
UniProt Secondary Accession #	O43288; O60932; O94801; Q498Z5; Q8IUD7; Q96J35; B3KT08; B4DK84; F5H741
UniProt Related Accession #	P49281
GenBank Nucleotide #	NM_000617.2
NCBI Official Full Name	natural resistance-associated macrophage protein 2 isoform 3

NCBI Official Synonym Full Names	solute carrier family 11 member 2
NCBI Official Symbol	SLC11A2
NCBI Official Synonym Symbols	DCT1; DMT1; AHMIO1; NRAMP2
UniProt Protein Name	Natural resistance-associated macrophage protein 2
UniProt Synonym Protein Names	Divalent cation transporter 1; Divalent metal transporter 1; DMT-1; Solute carrier family 11 member 2
UniProt Gene Name	SLC11A2
UniProt Synonym Gene Names	DCT1; DMT1; NRAMP2; NRAMP 2; DMT-1
NCBI Protein Information	natural resistance-associated macrophage protein 2
NCBI Summary for DMT1	This gene encodes a member of the solute carrier family 11 protein family. The product of this gene transports divalent metals and is involved in iron absorption. Mutations in this gene are associated with hypochromic microcytic anemia with iron overload. A related solute carrier family 11 protein gene is located on chromosome 2. Multiple transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Apr 2010]
UniProt Comments for DMT1	Important in metal transport, in particular iron. Can also transport manganese, cobalt, cadmium, nickel, vanadium and lead. Involved in apical iron uptake into duodenal enterocytes. Involved in iron transport from acidified endosomes into the cytoplasm of erythroid precursor cells. May play an important role in hepatic iron accumulation and tissue iron distribution. May serve to import iron into the mitochondria.
Research Articles on DMT1	**1.** Gene silencing of either CTR1 or DMT1 did not affect copper accumulation in cells, but deficiency in both CTR1 and DMT1 resulted in a complete inhibition of copper uptake.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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