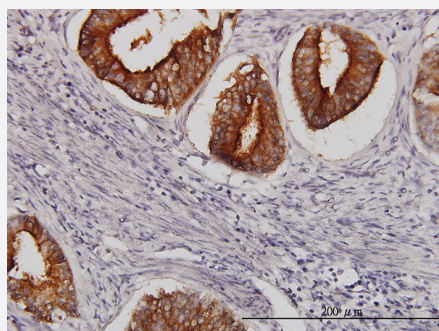


SLC11A2 monoclonal antibody (M01), clone 4C6

Catalog # H00004891-M01

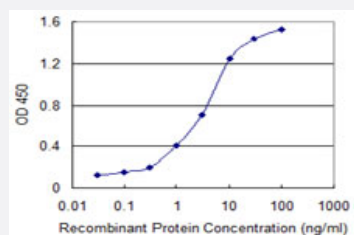
Size 100 ug

Applications



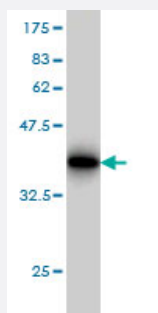
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to SLC11A2 on formalin-fixed paraffin-embedded human endometrium cancer. [antibody concentration 3 ug/ml]



Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged SLC11A2 is 0.03 ng/ml as a capture antibody.



Western Blot detection against Immunogen (32.89 KDa) .

Specification

Product Description

Mouse monoclonal antibody raised against a partial recombinant SLC11A2.

Immunogen	SLC11A2 (NP_000608, 1 a.a. ~ 65 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	MVLGPEQKMSDDSVSGDHGESASLGNINPAYSNPSLSQSPGDSEEYFATYFNEKISIPEEEEYSCF
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (75); Rat (75)
Isotype	IgG2a Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (32.89 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to SLC11A2 on formalin-fixed paraffin-embedded human endometrium cancer.
[antibody concentration 3 ug/ml]

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged SLC11A2 is 0.03 ng/ml as a capture antibody.

[Protocol Download](#)

- ELISA

Gene Info — SLC11A2

Entrez GeneID [4891](#)

GeneBank Accession#	NM_000617
Protein Accession#	NP_000608
Gene Name	SLC11A2
Gene Alias	DCT1, DMT1, FLJ37416, NRAMP2
Gene Description	solute carrier family 11 (proton-coupled divalent metal ion transporters), member 2
Omim ID	206100 600523
Gene Ontology	Hyperlink
Gene Summary	The SLC11A2 gene encodes a divalent metal transporter (DMT1), which carries iron, manganese, cobalt, nickel, cadmium, lead, copper, and zinc. DMT1 participates in cellular iron absorption at the luminal surface of the duodenum as well as in other areas of the body (Hubert and Hentze, 2002 [PubMed 12209011]; Ludwiczek et al., 2007 [PubMed 17293870]).[supplied by OMIM]
Other Designations	natural resistance-associated macrophage protein 2

Publication Reference

- [Defective palmitoylation of transferrin receptor triggers iron overload in Friedreich's ataxia fibroblasts.](#)

Floriane Petit, Anthony Drecourt, Michaël Dussiot, Coralie Zangarelli, Olivier Hermine, Arnold Munnich, Agnes Rotig.
Blood 2021 Apr; 137(15):2090.

Application: IP-WB, Human, Human skin fibroblasts

- [Maternal protein restriction depresses the duodenal expression of iron transporters and serum iron level in male weaning piglets.](#)

Ma W, Lu J, Jiang S, Cai D, Pan S, Jia Y, Zhao R.
The British Journal of Nutrition 2017 Apr; 117(7):923.

Application: WB-Ti, Pig, Pig duodenal mucosa

- [Discovery and characterization of a novel non-competitive inhibitor of the divalent metal transporter DMT1/SLC11A2.](#)

Montalbetti N, Simonin A, Simonin C, Awale M, Reymond JL, Hediger MA.
Biochemical Pharmacology 2015 Aug; 96(3):216.

Application: WB-Tr, Human, HEK 293 cells

- [Development and Validation of a Fast and Homogeneous Cell-Based Fluorescence Screening Assay for Divalent Metal Transporter 1 \(DMT1/SLC11A2\) Using the FLIPR Tetra.](#)

Montalbetti N, Simonin A, Dalghi MG, Kovacs G, Hediger MA.

Journal of Biomolecular Screening 2014 Jul; 19(6):900.

Application: WB, Human, HEK293 cells

- [Divalent metal transporter 1 \(DMT1\) regulation by Ndfip1 prevents metal toxicity in human neurons.](#)

Howitt J, Putz U, Lackovic J, Doan A, Dorstyn L, Cheng H, Yang B, Chan-Ling T, Silke J, Kumar S, Tan SS.

PNAS 2009 Sep; 106(36):15489.

Application: IF, IP, WB, Human, Human brain, primary neurons, SH-SY5Y cells

- [Regulation of the divalent metal ion transporter DMT1 and iron homeostasis by a ubiquitin-dependent mechanism involving Ndfips and WWP2.](#)

Foot NJ, Dalton HE, Shearwin-Whyatt LM, Dorstyn L, Tan SS, Yang B, Kumar S.

Blood 2008 Sep; 112(10):4268.

Application: WB, Human, Mouse, CHO cells, Mouse liver

Pathway

- [Lysosome](#)

Disease

- [Abortion](#)
- [Alzheimer disease](#)
- [Cardiovascular Diseases](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Hemochromatosis](#)
- [Hereditary hemochromatosis](#)
- [Iron Overload](#)

- [Tobacco Use Disorder](#)
- [Tuberculosis](#)