Product Datasheet

NRAMP2/SLC11A2/DMT1 Antibody (4C6) - Azide and BSA Free

H00004891-M01

Unit Size: 0.1 mg

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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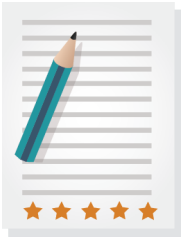
Updated 12/3/2025 v.20.1



H00004891-M01

NRAMP2/SLC11A2/DMT1 Antibody (4C6) - Azide and BSA Free

Product Information

Unit Size	0.1 mg
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	4C6
Preservative	No Preservative
Isotype	IgG2a Kappa
Purity	IgG purified
Buffer	In 1x PBS, pH 7.4

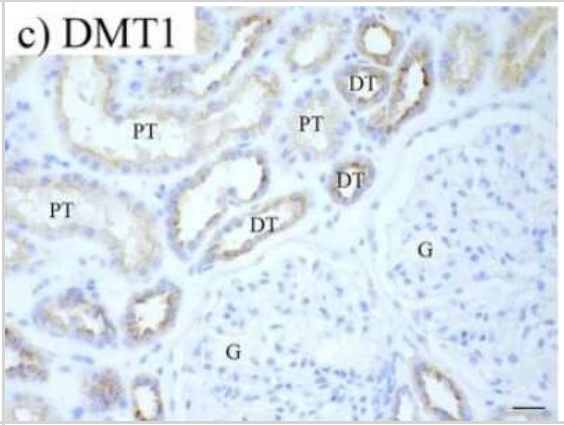
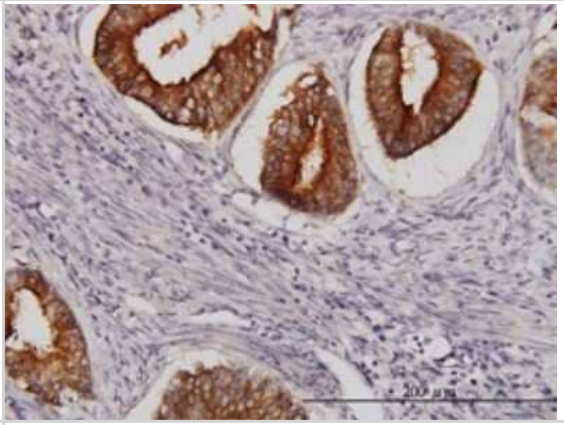
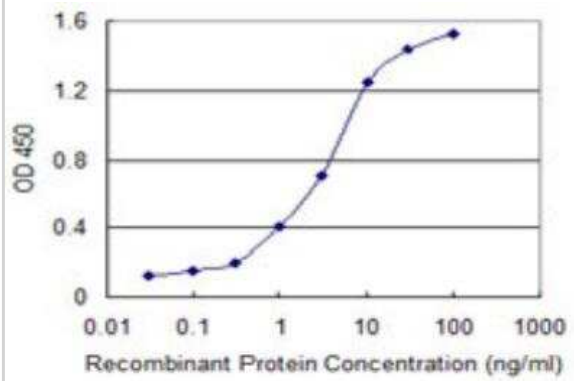
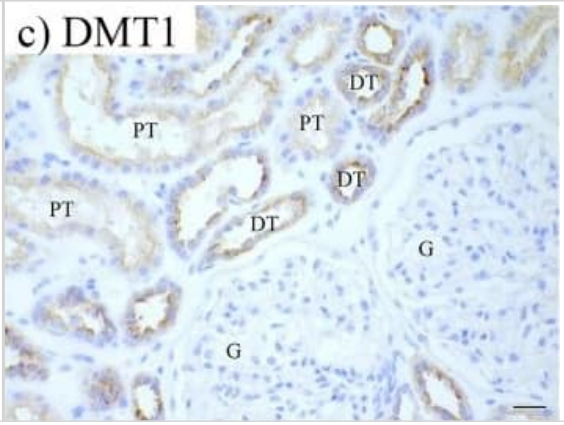
Product Description

Description	Quality control test: Antibody Reactive Against Recombinant Protein.
Host	Mouse
Gene ID	4891
Gene Symbol	SLC11A2
Species	Human, Mouse, Porcine, Bovine
Reactivity Notes	Bovine reactivity reported in scientific literature (PMID: 19820055).
Specificity/Sensitivity	SLC11A2 - solute carrier family 11 (proton-coupled divalent metal ion transporters), member 2
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. MVLGPEQKMSDDSVSGDHGESASLGNINPAYSNPSLSQSPGDSEEYFATYFN EKISIPEEEYSCF
Notes	This product is produced by and distributed for Abnova, a company based in Taiwan.

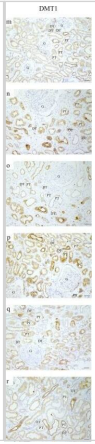
Product Application Details

Applications	Western Blot, Immunohistochemistry-Paraffin, ELISA, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunoprecipitation
Recommended Dilutions	Western Blot 1:100-1:2000, ELISA, Immunohistochemistry 1:10-1:500, Immunocytochemistry/ Immunofluorescence, Immunoprecipitation, Immunohistochemistry-Paraffin 1:10-1:500
Application Notes	It has been used for IHC-P and ELISA. Use in Immunohistochemistry reported in scientific literature (PMID: 29921869).

Images

Immunohistochemistry-Paraffin: NRAMP2/SLC11A2/DMT1 Antibody (4C6) [H00004891-M01] - Immunohistochemistry of iron handling proteins in healthy kidney. Representatives images of ZIP8 (a), ZIP14 (b), divalent metal transporter 1 (DMT1; c), L-ferritin (d), H-ferritin (e), and ferroportin (f) staining in healthy kidney. Renal structures indicated as glomerulus (g), proximal tubule (PT), distal tubule (DT). Scale bar 20uM. Image collected and cropped by CiteAb from the following publication (//www.nature.com/articles/s41598-018-27107-8) licensed under a CC-BY license.	
Immunohistochemistry-Paraffin: NRAMP2/SLC11A2/DMT1 Antibody (4C6) [H00004891-M01] - Analysis of monoclonal antibody to SLC11A2 on formalin-fixed paraffin-embedded human endometrium cancer. Antibody concentration 3 ug/ml.	
ELISA: NRAMP2/SLC11A2/DMT1 Antibody (4C6) [H00004891-M01] - Detection limit for recombinant GST tagged SLC11A2 is 0.03 ng/ml as a capture antibody.	
Immunohistochemistry: NRAMP2/SLC11A2/DMT1 Antibody (4C6) [H00004891-M01] - Immunohistochemistry of iron handling proteins in healthy kidney. Representatives images of ZIP8 (a), ZIP14 (b), divalent metal transporter 1 (DMT1; c), L-ferritin (d), H-ferritin (e), & ferroportin (f) staining in healthy kidney. Renal structures indicated as glomerulus (g), proximal tubule (PT), distal tubule (DT). Scale bar 20 µM. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/29921869), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	

Immunohistochemistry: NRAMP2/SLC11A2/DMT1 Antibody (4C6) [H00004891-M01] - Immunohistochemistry of putative iron importers in chronic kidney disease. Representative images of ZIP8 (a–f), ZIP14 (g–l), & divalent metal transporter 1 (DMT1; m–r) staining in control (a,g,m), early diabetic nephropathy (DNE; b,h,n), advanced diabetic nephropathy (DNA; c,i,o), focal segmental glomerulosclerosis (FSGS; d,j,p), lupus nephritis (LN; e,k,q) & IgA nephropathy (IgAN; f,l,r). Intensity in proximal & distal tubules quantified (s). Dots represent all quantified images (5 images per biopsy). Renal structures indicated as glomerulus (G), proximal tubule (PT), distal tubule (DT). Scale bar 40 µM. **p < 0.01; ***p < 0.001. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/29921869), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Zhao L, Bartnikas T, Chu X et al. Hyperglycemia promotes microvillus membrane expression of DMT1 in intestinal epithelial cells in a PKCa-dependent manner. FASEB J. 2018-11-13 [PMID: 30423260] (WB, Human)

Raaij SV, Swelm RV, Bouman K et al. Tubular iron deposition and iron handling proteins in human healthy kidney and chronic kidney disease Sci Rep 2018-06-19 [PMID: 29921869] (IF/IHC, Human)

Ma W, Lu J, Jiang S et al. Maternal protein restriction depresses the duodenal expression of iron transporters and serum iron level in male weaning piglets. Br J Nutr 2017-05-23 [PMID: 28534724]

Montalbetti N, Simonin A, Dalghi MG et al. Development and Validation of a Fast and Homogeneous Cell-Based Fluorescence Screening Assay for Divalent Metal Transporter 1 (DMT1/SLC11A2) Using the FLIPR Tetra. J Biomol Screen. 2014-02-06 [PMID: 24505080]

Montalbetti N, Simonin A, Simonin C et al. Discovery and characterization of a novel non-competitive inhibitor of the divalent metal transporter DMT1/SLC11A2. Biochem Pharmacol. 2015-06-02 [PMID: 26047847]

Hansen SL, Trakooljul N, Liu HC et al. Proteins involved in iron metabolism in beef cattle are affected by copper deficiency in combination with high dietary manganese, but not by copper deficiency alone J Anim Sci 2010-01-01 [PMID: 19820055] (WB, Bovine)

Barth S, Edlich F, Berchner-Pfannschmidt U et al. Hypoxia-inducible Factor Prolyl-4-hydroxylase PHD2 Protein Abundance Depends on Integral Membrane Anchoring of FKBP38. J Biol Chem;284(34):23046-23058. 2009-01-01 [PMID: 19546213]

Howitt J, Putz U, Lackovic J et al. Divalent metal transporter 1 (DMT1) regulation by Ndfip1 prevents metal toxicity in human neurons. Proc Natl Acad Sci U S A. 2009-08-25 [PMID: 19706893]

Foot NJ, Dalton HE, Shearwin-Whyatt LM et al. Regulation of the divalent metal ion transporter DMT1 iron homeostasis by a ubiquitin-dependent mechanism involving Ndfips WWP2. Blood;112(10):4268-75. 2008-11-15 [PMID: 18776082]

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HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
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NBP1-96981-0.5mg	Mouse IgG2a Kappa Isotype Control (M2AK)
H00004891-Q01-10ug	Recombinant Human NRAMP2/SLC11A2/DMT1 GST (N-Term) Protein

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This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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