

For Research Use Only

DMT1 Polyclonal antibody

Catalog Number: 20507-1-AP

Featured Product

100 Publications



Basic Information

Catalog Number:

20507-1-AP

Size:

150ul, Concentration: 600 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG14314

GenBank Accession Number:

BC002592

GeneID (NCBI):

4891

UNIPROT ID:

P49281

Full Name:

solute carrier family 11 (proton-coupled divalent metal ion transporters), member 2

Calculated MW:

568 aa, 62 kDa

Observed MW:

60-70 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:4000

IHC 1:50-1:500

IF-P 1:400-1:1600

IF/ICC 1:200-1:800

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, pig, chicken, bovine

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : HuH-7 cells, COLO 320 cells, Caco-2 cells, rat kidney tissue, SH-SY5Y cells, Neuro-2a cells

IHC : mouse brain tissue, human pancreas tissue

IF-P : mouse small intestine tissue, mouse brain tissue

IF/ICC : HepG2 cells,

Background Information

SLC11A2 (also known as DMT1, Nramp2, and DCT1) is a member of the divalent cation transporters that play a central role in iron homeostasis. SLC11A2 is widely expressed in many tissues including the brain, kidney, testis, duodenum, and placenta. As a membrane protein, SLC11A2 is localized on the apical membrane of enterocytes as well as in transferrin-cycle endosomes. Four isoforms of SLC11A2 exist due to the alternative splicing. They differ at the NH2 and COOH termini but share a common central domain. A variety of molecular weights of SLC11A2 in western blot analysis, ranging from 50 to 100 kDa, has been reported in different cells and species. The differences in molecular weights may be attributed to the level of glycosylation, proteolysis, or the membrane protein itself. This antibody detected various forms of SLC11A2 of 45-100 kDa.

Notable Publications

Author	Pubmed ID	Journal	Application
Tao Xiang	34592245	Brain Res	WB
Peng Zhao	31551410	Cell Death Dis	WB
Guangli Rong	36247243	Am J Transl Res	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

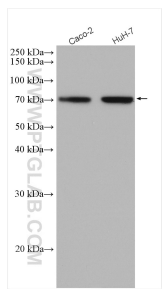
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

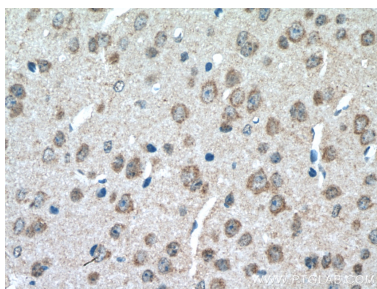
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

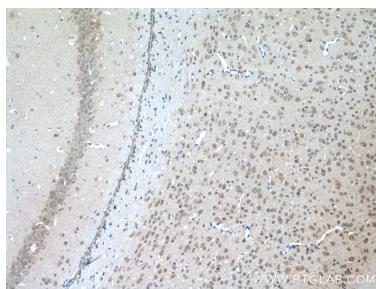
Selected Validation Data



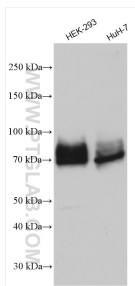
Various cell lysates were subjected to SDS PAGE followed by western blot with 20507-1-AP (DMT1 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



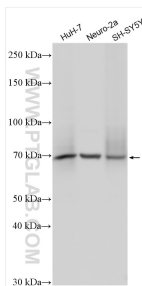
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 20507-1-AP (SLC11A2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



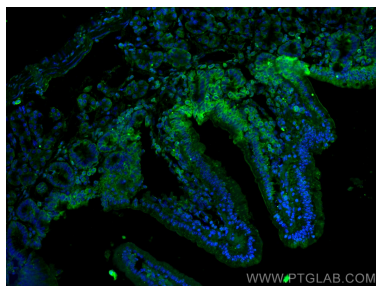
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 20507-1-AP (SLC11A2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



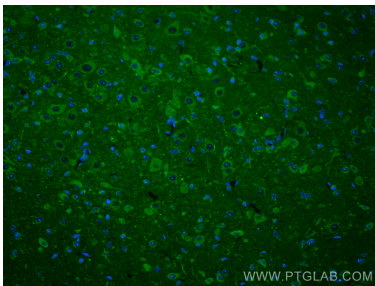
Various lysates were subjected to SDS PAGE followed by western blot with 20507-1-AP (DMT1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



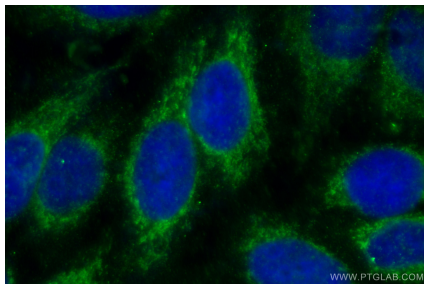
Various lysates were subjected to SDS PAGE followed by western blot with 20507-1-AP (DMT1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed mouse small intestine tissue using DMT1 antibody (20507-1-AP) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using DMT1 antibody (20507-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using DMT1 antibody (20507-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).