## For Research Use Only

## DMT1 Recombinant antibody, PBS Only



**Purification Method:** 

Protein A purification

CloneNo.:

1|13

Catalog Number:81609-1-PBS

**Basic Information** 

Catalog Number:

81609-1-PBS

Size:

100ug , Concentration: 1mg/ml by

Nanodrop;

Rabbit Isotype: IgG

Immunogen Catalog Number:

AG14314

GenBank Accession Number:

BC002592 GeneID (NCBI):

Jenero (NCBI).

UNIPROT ID:

P49281 Full Name:

solute carrier family 11 (protoncoupled divalent metal ion

transporters), member 2

Calculated MW: 568 aa, 62 kDa

Observed MW:

70 kDa

**Applications** 

**Tested Applications:** 

Indirect ELISA, IP, WB

Species Specificity:

rat, mouse, human

## **Background Information**

SLC11A2 (also known as DMT1, Nramp2, and DCT1) is a member of the divalent cation transporters that plays a central role in iron homeostasis. SLC11A2 is widely expressed in many tissues including 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.

Storage

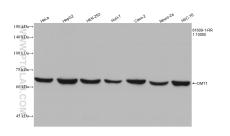
Storage:

Store at -80°C.

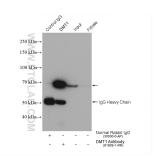
Storage Buffer:

PBS Only

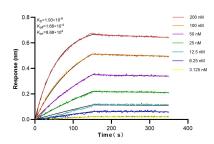
## **Selected Validation Data**



Various lysates were subjected to SDS PAGE followed by western blot with 81609-1-RR (DMT1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 81609-1-PBS in a different storage buffer formulation.



IP result of anti-DMT1 (IP:81609-1-RR, 4ug; Detection:81609-1-RR 1:2000) with HEK-293 cells lysate 1480 ug. This data was developed using the same antibody clone with 81609-1-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 81609-1-RR against Human DMT1 were performed. The affinity constant is 1.93 nM.