

DMT1 Rabbit pAb

Catalog Number: bs-3577R

Target Protein: DMT1

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: WB (1:500-2000), IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500)

Reactivity: Human, Mouse, Rat (predicted: Cow)

Predicted MW: 62 kDa

Subcellular: Cytoplasm

Locations:

Entrez Gene: 4891

Swiss Prot: P49281

Source: KLH conjugated synthetic peptide derived from human DMT1: 251-350/568.

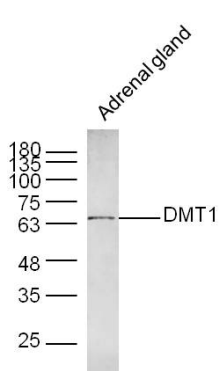
Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

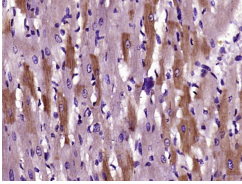
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: DMT1 is a major transporter of ferrous iron from the intestinal lumen. DMT1 belongs to the family of NRAMP metal ion transporters which function in diverse organisms from bacteria to human. DMT1 (NRAMP2) transports metal ions at the plasma membrane of cells of both the duodenum and in peripheral tissues, and defective DMT1 causes anaemia.

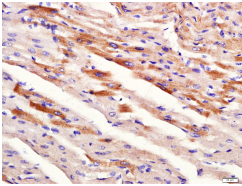
VALIDATION IMAGES



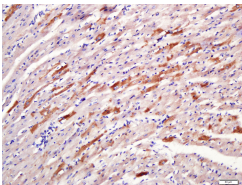
Sample: Adrenal glands (Mouse) Lysate at 40 ug Primary: Anti-DMT1 (bs-3577R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 62 kD Observed band size: 64 kD



Paraformaldehyde-fixed, paraffin embedded (Rat heart); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (DMT1) Polyclonal Antibody, Unconjugated (bs-3577R) at 1:400 overnight at 4°C, followed by a conjugated secondary antibody (sp-0023) for 20 minutes and DAB staining.



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PRODUCT SPECIFIC PUBLICATIONS

[IF=10.787] Limin Shi. et al. FoxO1 regulates adipose transdifferentiation and iron influx by mediating Tgfβ1 signaling pathway. REDOX BIOL. 2023 Jul;63:102727 WB ; Mouse . 37156218

[IF=8.1] Chen Wang. et al. Microbial metabolite deoxycholic acid-mediated ferroptosis exacerbates high-fat diet-induced colonic inflammation. MOL METAB. 2024 Apr;:101944 WB ; Rat . 38642891

[IF=6.543] Zhang Hongxia. et al. Hepcidin Promoted Ferroptosis through Iron Metabolism which Is Associated with DMT1 Signaling Activation in Early Brain Injury following Subarachnoid Hemorrhage. Oxid Med Cell Longev. 2021;2021:9800794 WB,IF ; Rat . 34987706

[IF=5.959] Zhang C et al. “Iron free” zinc oxide nanoparticles with ion-leaking properties disrupt intracellular ROS and iron homeostasis to induce ferroptosis. Cell Death Dis. 2020 Mar 13;11(3):183. WB ; mouse . 32170066

[IF=6.17] Qian Wang. et al. Efficient iron utilization compensates for loss of extracellular matrix of ovarian cancer spheroids. Free Radical Bio Med. 2021 Feb;164:369 IF ; Human . 33450374