

**bs-3577R****[ Primary Antibody ]****Bioss**  
**ANTIBODIES**

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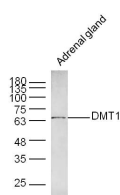
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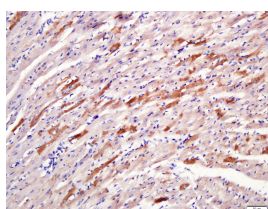
400-901-9800

**DMT1 Rabbit pAb****— DATASHEET —**

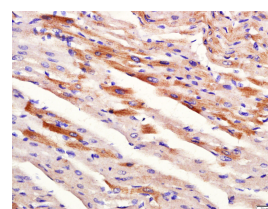
<b>Host:</b> Rabbit	<b>Isotype:</b> IgG	<b>Applications:</b> <b>WB</b> (1:500-2000)
<b>Clonality:</b> Polyclonal		<b>IHC-P</b> (1:100-500)
<b>GeneID:</b> 4891	<b>SWISS:</b> P49281	<b>IHC-F</b> (1:100-500)
<b>Target:</b> DMT1		<b>IF</b> (1:100-500)
<b>Immunogen:</b> KLH conjugated synthetic peptide derived from human DMT1: 251-350/568.		<b>Reactivity:</b> Mouse, Rat (predicted: Human, Cow)
<b>Purification:</b> affinity purified by Protein A		
<b>Concentration:</b> 1mg/ml		<b>Predicted MW.:</b> 62 kDa
<b>Storage:</b> 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.		<b>Subcellular Location:</b> Cytoplasm
<b>Background:</b> 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 (Divalent metal transporter 1; 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.



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 (Divalent metal transporter 1; 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.

**— SELECTED CITATIONS —**

- **[IF=13]** Ximing Yang. et al. A dual absorption pathway of novel oyster-derived peptide-zinc complex enhances zinc bioavailability and restores mitochondrial function. J ADV RES. 2025 Feb.; WB ;Human. 39955018
- **[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.

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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