Product Datasheet

SLC31A1/CTR1 Antibody (5E6.1B4) - BSA Free
NBP2-36573

Unit Size: 0.1 mg

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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Publications: 4

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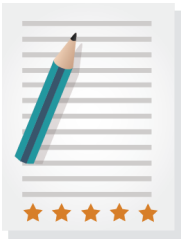
www.novusbio.com/NBP2-36573

Updated 10/23/2024 v.20.1



NBP2-36573

SLC31A1/CTR1 Antibody (5E6.1B4) - BSA Free

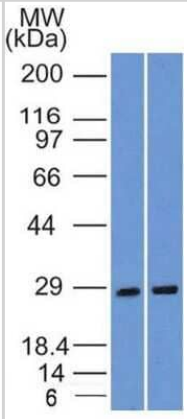
Product Information	
Unit Size	0.1 mg
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	5E6.1B4
Preservative	0.05% Sodium Azide
Isotype	IgG2b Kappa
Purity	Protein G purified
Buffer	PBS

Product Description	
Host	Mouse
Gene ID	1317
Gene Symbol	SLC31A1
Species	Human, Mouse
Reactivity Notes	Use in Mouse reported in scientific literature (PMID:32060280).
Immunogen	Two synthetic peptides made to internal sequences of human SLC31A1/CTR1 protein (sequences found between amino acids 50-150) [UniProt# O15431]

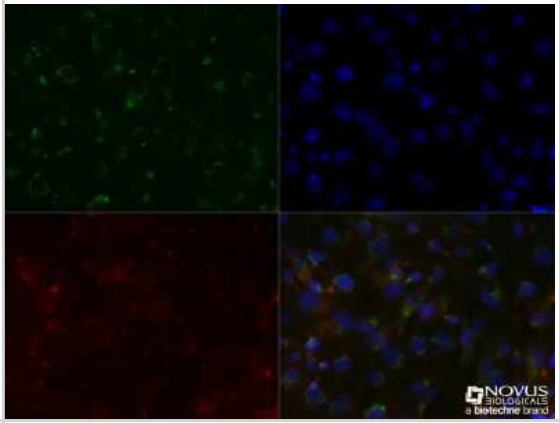
Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 2 ug/ml, Immunohistochemistry 5 ug/ml, Immunocytochemistry/ Immunofluorescence 1:50, Immunohistochemistry-Paraffin 5 ug/ml

Images

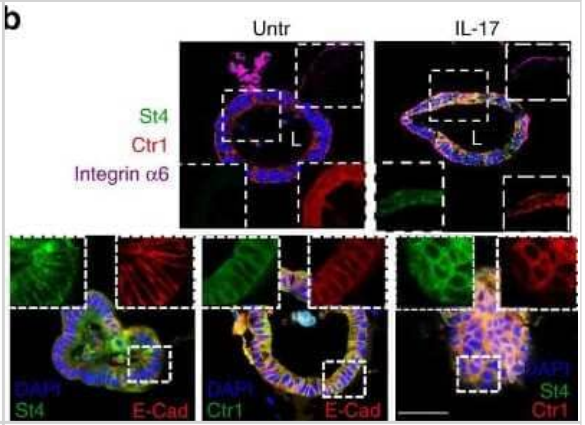
Western Blot: SLC31A1/CTR1 Antibody (5E6.1B4) - BSA Free [NBP2-36573] - Analysis of SLC31A1/CTR1 in MCF7 and HeLa at 2 ug/ml.



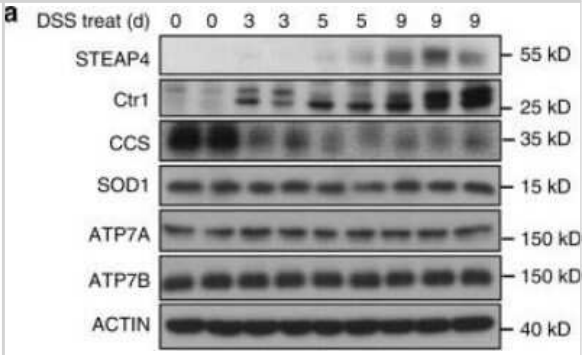
Immunocytochemistry/Immunofluorescence: SLC31A1/CTR1 Antibody (5E6.1B4) - BSA Free [NBP2-36573] - HepG2 cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X TBS + 0.5% Triton X-100. The cells were incubated with anti SLC31A1/CTR1 (5E6.1B4) NBP2-36573 at a 1:50 dilution overnight at 4C and detected with an anti-mouse DyLight 488 (Green) at a 1:500 dilution. Actin was detected with Phalloidin 568 (Red) at a 1:200 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.



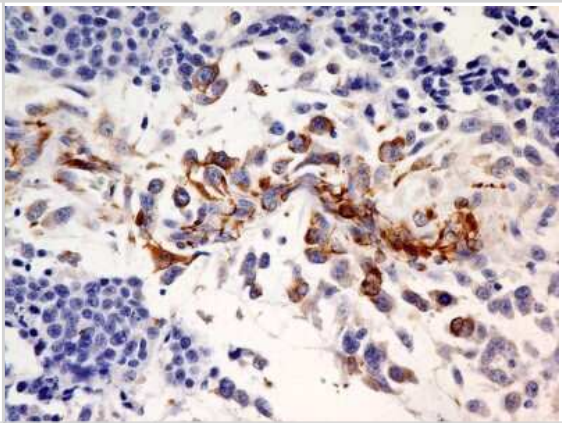
Immunohistochemistry: SLC31A1/CTR1 Antibody (5E6.1B4) - BSA Free [NBP2-36573] - IL-17 induces cellular copper uptake through induction of STEAP4. Western blots analysis for copper trafficking-associated proteins from lysates of mouse colon epithelial organoids treated with different inflammatory cytokines for 8h. Three independent experiments were done and representative blots were shown. Untr untreated. IL-17 primed or unprimed mouse colon organoids were stained for STEAP4 (St4), E-cadherin (E-cad) and SLC31A1/CTR1 and integrin alpha. Scale bar, 100 um. Image collected and cropped by CiteAb from the following publication (https://www.nature.com/articles/s41467-020-14698-y), licensed under a CC-BY license.

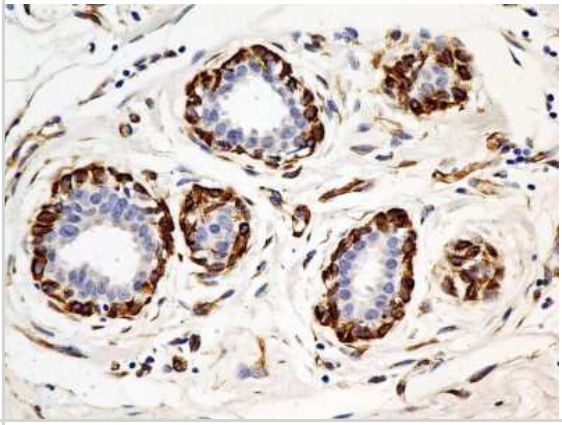
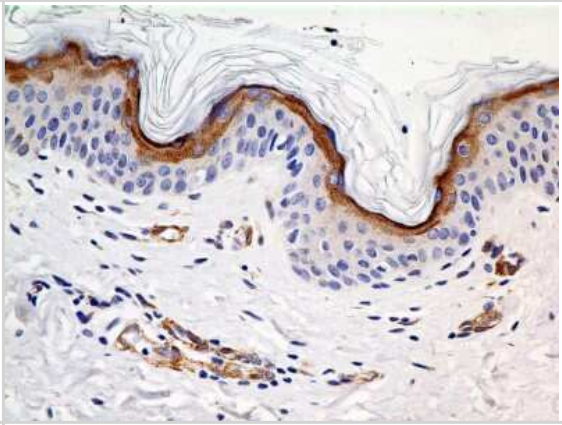
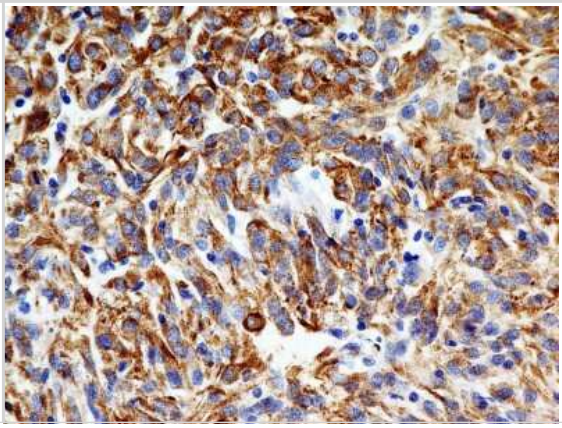


Western Blot: SLC31A1/CTR1 Antibody (5E6.1B4) - BSA Free [NBP2-36573] - STEAP4 promotes colitis-associated colon tumorigenesis. Western blot analysis of colon tissue lysates from mice treated with DSS water for indicated days. Western blot analysis of colon tissue lysates from mice treated with DSS water for indicated days. Image collected and cropped by CiteAb from the following publication (//pubmed.ncbi.nlm.nih.gov/32060280/) licensed under a CC-BY license.



Immunohistochemistry-Paraffin: SLC31A1/CTR1 Antibody (5E6.1B4) - BSA Free [NBP2-36573] - Analysis of a formalin fixed and paraffin embedded tissue section of human urinary bladder transitional cell carcinoma (NBP2-30234) using purified CTR1/SLC31A1 antibody clone 5E6.1B4 at 5 ug/ml concentration.



Immunohistochemistry-Paraffin: SLC31A1/CTR1 Antibody (5E6.1B4) - BSA Free [NBP2-36573] - Analysis of a FFPE tissue section of normal breast tissue from a human breast cancer patient (NBP2-30234) using purified CTR1/SLC31A1 antibody clone 5E6.1B4 at 5 ug/ml concentration. The antibody generated a very strong cytoplasmic staining in the myo-epithelial cells in the tested section.	
Immunohistochemistry-Paraffin: SLC31A1/CTR1 Antibody (5E6.1B4) - BSA Free [NBP2-36573] - Analysis of a FFPE tissue section of normal skin from a human breast cancer patient (NBP2-30234) using purified CTR1/SLC31A1 antibody clone 5E6.1B4 at 5 ug/ml concentration. The antibody developed a strong cytoplasmic staining in the outer layer of stratum spinosum and the cells of stratum granulosum/ granular layer of skin epidermis. The endothelial cells in the dermis of the section also showed positivity for SLC31A1/CTR1.	
Immunohistochemistry-Paraffin: SLC31A1/CTR1 Antibody (5E6.1B4) - BSA Free [NBP2-36573] - Aanalysis of a FFPE tissue section of human small bowel malignant stromal tumor (NBP2-30234) using purified CTR1/SLC31A1 antibody clone 5E6.1B4 at 5 ug/ml concentration. The cancer cells developed moderate to strong positivity for CTR1/SLC31A1 protein.	

Publications

Bonet-Aletá J, Pezacki A, Oi M et al. An Activity-Based Sensing Approach to Monitor Nanomaterial-Promoted Changes in Labile Metal Pools in Living Systems ChenRxiv 2023-06-15 (WB, Human)

Details:
Dilution 1:500

Ito F, Kato K, Yanatori I et al. Matrigel-based organoid culture of malignant mesothelioma reproduces cisplatin sensitivity through CTR1 BMC cancer 2023-05-31 [PMID: 37254056]

Bonet-Aleta J, Pezacki A, Oi M et al. Therapeutic Copper-based Nanoparticles Release Labile Copper(II) and Trigger Cellular Responses in Glutathione and NRF2 Redox Pathways and Metal Homeostasis ChemRxiv 2023-03-24 (WB)

Liao Y, Zhao J, Bulek K et al. Inflammation mobilizes copper metabolism to promote colon tumorigenesis via an IL-17 -STEAP4-XIAP axis Nat Commun 2020-02-14 [PMID: 32060280] (IHC-P, Mouse)

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NBP1-43317-0.5mg	Mouse IgG2b Kappa Light Chain Isotype Control (MG2b)
NBP2-36573B	SLC31A1/CTR1 Antibody (5E6.1B4) [Biotin]

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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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