

Anti-SLC31A1 / CTR1 Antibody [JE56-93]

HA720005



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB
Molecular Wt:	Predicted band size: 21 kDa.
Clone number:	JE56-93

Description: High affinity copper uptake protein 1 (Ctr1) is a protein that in humans is encoded by the SLC31A1 gene. Copper is an element essential for life, but excessive copper can be toxic or even lethal to the cell. Therefore, cells have developed sophisticated ways to maintain a critical copper balance, with the intake, export, and intracellular compartmentalization or buffering of copper strictly regulated. The 2 related genes ATP7A (MIM 300011) and ATP7B (MIM 606882), responsible for the human diseases Menkes syndrome (MIM 309400) and Wilson disease (MIM 277900), respectively, are involved in copper export. In *S. cerevisiae*, the copper uptake genes CTR1, CTR2, and CTR3 have been identified, and in human the CTR1 and CTR2 (MIM 603088) genes have been identified.

Immunogen: Recombinant protein within human SLC31A1 aa 1-82.

Positive control: A549 cell lysate, Neuro-2a cell lysate, C6 cell lysate, Mouse liver tissue lysate, Rat brain tissue lysate, HeLa cell lysate, Caco-2 cell lysate, C2C12 cell lysate.

Subcellular location: Cell membrane.

Database links: SwissProt: O15431 Human | Q8K211 Mouse | Q9JK41 Rat

Recommended Dilutions:

WB 1:1,000-1:2,000

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

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Images

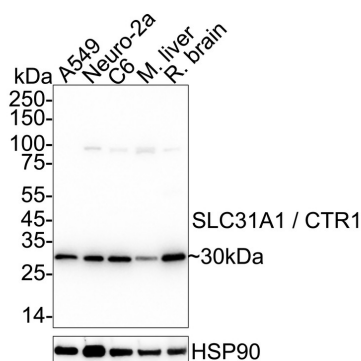


Fig1: Western blot analysis of SLC31A1 / CTR1 on different lysates with Rabbit anti-SLC31A1 / CTR1 antibody (HA720005) at 1/1,000 dilution.

Lane 1: A549 cell lysate (20 µg/Lane)

Lane 2: Neuro-2a cell lysate (20 µg/Lane)

Lane 3: C6 cell lysate (20 µg/Lane)

Lane 4: Mouse liver tissue lysate (40 µg/Lane)

Lane 5: Rat brain tissue lysate (40 µg/Lane)

Predicted band size: 21 kDa

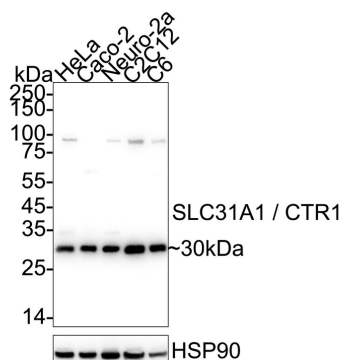
Observed band size: 30 kDa

Exposure time: 6 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA720005) at 1/1,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

Fig2: Western blot analysis of SLC31A1 / CTR1 on different lysates with Rabbit anti-SLC31A1 / CTR1 antibody (HA720005) at 1/2,000 dilution.



Lane 1: HeLa cell lysate

Lane 2: Caco-2 cell lysate

Lane 3: Neuro-2a cell lysate

Lane 4: C2C12 cell lysate

Lane 5: C6 cell lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 21 kDa

Observed band size: 30 kDa

Exposure time: 6 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA720005) at 1/2,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

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Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Yu Z. et. al. Blockage of SLC31A1-dependent copper absorption increases pancreatic cancer cell autophagy to resist cell death. *Cell Prolif.* 2019 Mar
2. Sun C. et. al. Genetic polymorphism of SLC31A1 is associated with clinical outcomes of platinum-based chemotherapy in non-small-cell lung cancer patients through modulating microRNA-mediated regulation. *Oncotarget.* 2018 May

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