

**LAT1/SLC7A5 polyclonal antibody**

Catalog: BS70514

Host: Rabbit

Reactivity: Human, Mouse, Rat

**BackGround:**

The heterodimer with SLC3A2 functions as sodium-independent, high-affinity transporter that mediates uptake of large neutral amino acids such as phenylalanine, tyrosine, L-DOPA, leucine, histidine, methionine and tryptophan. Functions as an amino acid exchanger. May play a role in the transport of L-DOPA across the blood-brain barrier (By similarity. May act as the major transporter of tyrosine in fibroblasts (Probable. May mediate blood-to-retina L-leucine transport across the inner blood-retinal barrier (By similarity. Can mediate the transport of thyroid hormones triiodothyronine (T3 and thyroxine (T4 across the cell membrane. When associated with LAPT4B, the heterodimer formed by SLC3A2 and SLC7A5 is recruited to lysosomes to promote leucine uptake into these organelles, and thereby mediates mTORC1 activation. Involved in the uptake of toxic methylmercury (MeHg when administered as the L-cysteine or D,L-homocysteine complexes. Involved in the cellular activity of small molecular weight nitrosothiols, via the stereoselective transport of L-nitrosocysteine (L-CNSO across the membrane.

**Product:**

1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

**Molecular Weight:**

45KDa

**Swiss-Prot:**

Q01650

**Purification&Purity:**

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

**Applications:**

WB,1:500 - 1:1000|IF/ICC,1:50 - 1:200

**Storage&Stability:**

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

**Category:**

Polyclonal Antibodies

**DATA:**

Western blot analysis of extracts of HT-1080 cells, using LAT1/SLC7A5 Rabbit pAb at 1:1000 dilution.<br>Secondary antibody: HRP Goat Anti-Rabbit IgG at 1:10000 dilution.<br>Lysates/proteins: 25ug per lane.<br>Blocking buffer: 3% nonfat dry milk in TBST.<br>Detection: ECL Basic Kit .<br>Exposure time: 5s.

Immunofluorescence analysis of MCF7 cells using LAT1/SLC7A5 Rabbit pAb at dilution of 1:300 . Blue: DAPI for nuclear staining.

**Note:**

For research use only, not for use in diagnostic procedure.

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