

## Product datasheet for **TA381705**

### SLC7A5 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, WB
Recommended Dilution:	WB,1:500 - 1:1000 IF,1:50 - 1:200
Reactivity:	Human, Mouse, Rat
Modifications:	Unmodified
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant fusion protein containing a sequence corresponding to amino acids 1-125 of human SLC7A5 (NP_003477.4).
Formulation:	Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C. Avoid freeze / thaw cycles.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	55kDa
Gene Name:	solute carrier family 7 member 5
Database Link:	<a href="#">Entrez Gene 8140 Human Q01650</a>



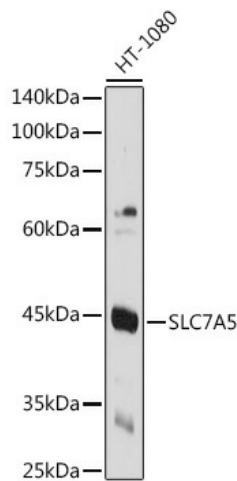
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**Background:**

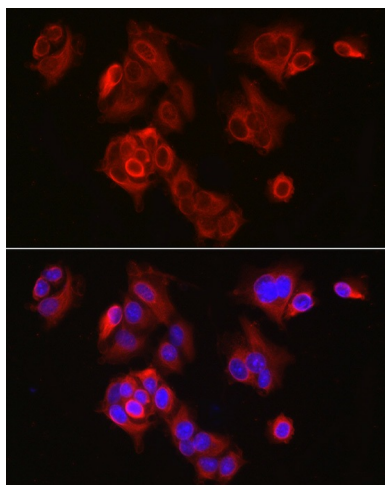
The heterodimer with SLC3A2 functions as sodium-independent, high-affinity transporter that mediates uptake of large neutral amino acids such as phenylalanine, tyrosine, L-DOPA, leucine, histidine, methionine and tryptophan. Functions as an amino acid exchanger. May play a role in the transport of L-DOPA 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.

**Synonyms:**

4F2LC; CD98; CD98LC; D16S469E; E16; hLAT1; LAT1; MPE16

**Product images:**

Western blot analysis of extracts of HT-1080 cells, using SLC7A5 Rabbit pAb (TA381705) at 1:1000 dilution. | Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. | Lysates/proteins: 25ug per lane. | Blocking buffer: 3% nonfat dry milk in TBST. | Detection: ECL Basic Kit . | Exposure time: 5s.



Immunofluorescence analysis of MCF7 cells using SLC7A5 Rabbit pAb (TA381705) at dilution of 1:300 (40x lens). Blue: DAPI for nuclear staining.