

**Anti-CAT1 Antibody**  
**Catalog # ABO11555****Specification**

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**Anti-CAT1 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P30825</a>
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for High affinity cationic amino acid transporter 1(SLC7A1) detection. Tested with WB in Human.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-CAT1 Antibody - Additional Information**

**Gene ID** 6541

**Other Names**

High affinity cationic amino acid transporter 1, CAT-1, CAT1, Ecotropic retroviral leukemia receptor homolog, Ecotropic retrovirus receptor homolog, ERR, Solute carrier family 7 member 1, System Y+ basic amino acid transporter, SLC7A1, ATRC1, ERR, REC1L

**Calculated MW**

67638 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Human<br>

**Subcellular Localization**

Cell membrane ; Multi-pass membrane protein .

**Tissue Specificity**

Ubiquitous. .

**Protein Name**

High affinity cationic amino acid transporter 1

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human CAT1(613-629aa LDADQARTPDGNLDQCK), different from the related mouse and rat sequences by four amino acids.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Anti-CAT1 Antibody - Protein Information**

**Name** SLC7A1 ([HGNC:11057](#))

**Function**

High-affinity, low capacity permease involved in the transport of the cationic amino acids (arginine, lysine and ornithine) in non-hepatic tissues.

**Cellular Location**

Cell membrane {ECO:0000250|UniProtKB:Q09143}; Multi-pass membrane protein

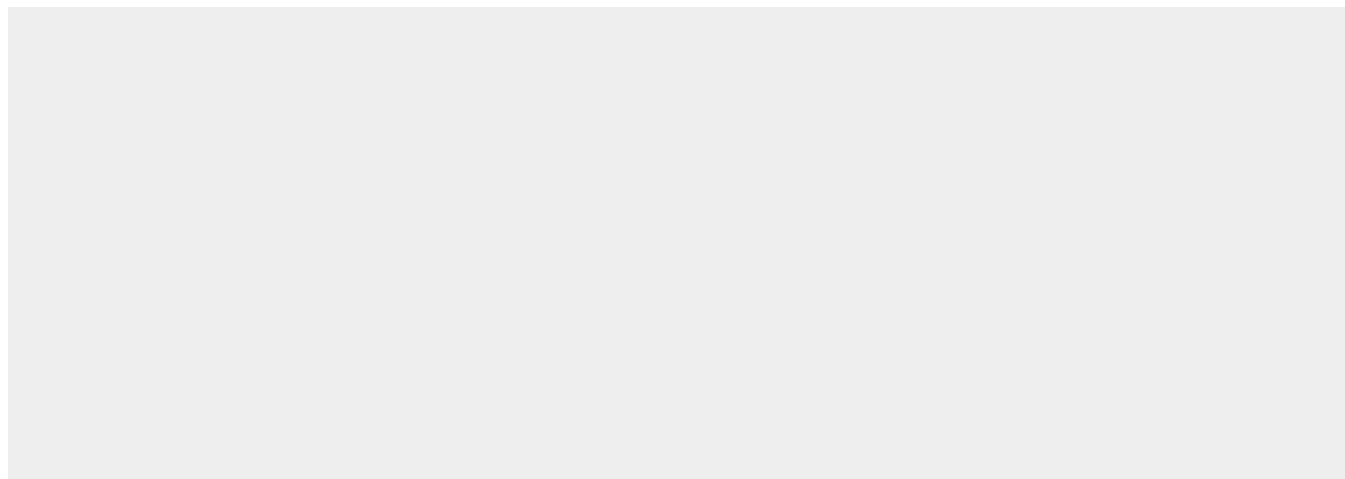
**Tissue Location**

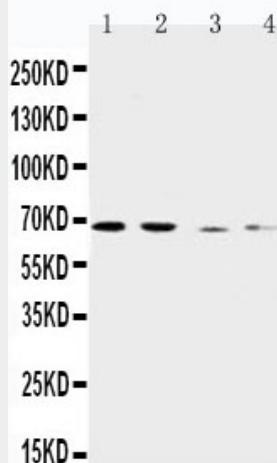
Ubiquitous..

**Anti-CAT1 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-CAT1 Antibody - Images**



Anti-CAT1 antibody, ABO11555, Western blotting  
Lane 1: Human Placenta Tissue Lysate  
Lane 2: HELA Cell Lysate  
Lane 3: SKOV-3 Cell Lysate  
Lane 4: HT1080 Cell Lysate

### **Anti-CAT1 Antibody - Background**

High affinity cationic amino acid transporter 1, also called solute carrier family 7 (cationic amino acid transporter,  $\gamma^+$  system), member 1 (SLC7A1) or ATRC1 is a protein that in humans is encoded by the SLC7A1 gene. This gene is mapped to 13q12.3. It acts as a cationic amino acid transporter and as an ecotropic retrovirus receptor and plays a role in the  $\text{Na}^+$ -independent  $\gamma^+$  cationic amino acid transport system. This gene is high-affinity, low capacity permease involved in the transport of the cationic amino acids (arginine, lysine and ornithine) in non-hepatic tissues.