Datasheet for ABIN6655337

# anti-SLC7A11 antibody

4 Images | 1 Publication

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## Overview

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|---|---|
| Quantity: | 25 µL |
| Target: | SLC7A11 |
| Reactivity: | Human |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Conjugate: | This SLC7A11 antibody is un-conjugated |
| Application: | Western Blotting (WB), Immunohistochemistry (IHC), ELISA, Flow Cytometry (FACS), Immunofluorescence (IF), Immunoprecipitation (IP), Fluorescence Microscopy (FM) |

## Product Details

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| Purpose: | xCT Antibody |
| Immunogen: | Anti-xCT antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal portion of human xCT conjugated to Keyhole Limpet Hemocyanin (KLH). |
| Isotype: | IgG |
| Cross-Reactivity (Details): | This affinity purified antibody is directed against human xCT. |
| Purification: | This product was affinity purified from monospecific antiserum by immunoaffinity purification. |
| Sterility: | Sterile filtered |

## Target Details

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| Target: | SLC7A11 |

## Target Details

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| Alternative Name: | xCT (SLC7A11 Products) |
| Background: | Synonyms: rabbit anti-xCT antibody, SLC7A11, Cystine/glutamate transporter, Amino acid transport system xc-, Calcium channel blocker resistance protein CCBR1, Solute carrier family 7 member 11<br>Background: xCT belongs to the amino acid-polyamine-organocation (APC) superfamily and L-type amino acid transporter (LAT) family. xCT gene encodes a member of a heteromeric, sodium-independent, anionic amino acid transport system that is highly specific for cysteine and glutamate. In this system, designated Xc(-), the anionic form of cysteine is transported in exchange for glutamate. Increased expression of this gene results in neuronal cell death. xCT may be associated with kaposi sarcoma, dyscalculia, cystinuria, spondylolsis, and anemia of prematurity. Anti-xCT Antibody is useful for researchers interested in Cancer Research, Glucose/Energy Metabolism Research, and Cell Surface Protein Interaction Research.<br>Gene Name: SLC7A11 |
| Gene ID: | 23657 |
| NCBI Accession: | NP_055146 |
| UniProt: | Q9UPY5 |

## Application Details

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| Application Notes: | Immunoprecipitation_Dilution: User Optimized<br>ELISA_Dilution: 5 µg/mL<br>Immunohistochemistry_Dilution: 1:200<br>Flow_Cytometry_Dilution: 1:200<br>IF_Microscopy_Dilution: 10 µg/mL<br>Western_Blot_Dilution: 1:1000 |
| Comment: | Anti-xCT Antibody has been tested in Western Blot, ELISA, Immunofluorescence, and flow cytometry. Expect a band at 55.4 kDa in western blot using appropriate lysates. Positive control used HeLa, NIH-3T3, A549, HCT-116, or PC3 whole cell lysates at 0.1-1.0µg/mL for WB and PC3 with MeOH at 10µg/mL in IF. Although not tested, this antibody is likely functional in immunohistochemistry and immunoprecipitation. |
| Restrictions: | For Research Use only |

## Handling

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| Format: | Liquid |

## Handling

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| Buffer: | Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2<br>Stabilizer: None<br>Preservative: 0.01 % (w/v) Sodium Azide |
| Preservative: | Sodium azide |
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |
| Storage: | -20 °C |
| Storage Comment: | Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing. |
| Expiry Date: | 12 months |

## Publications

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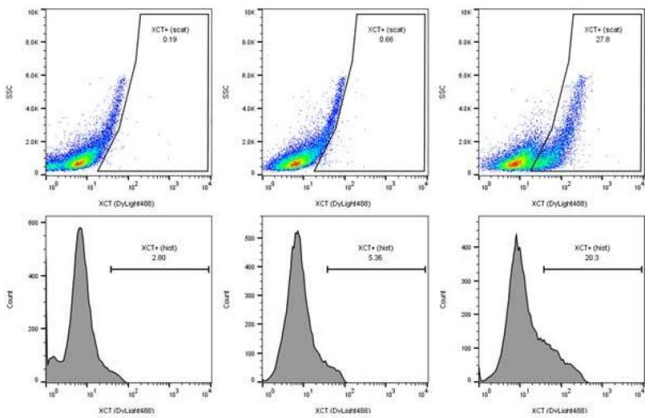
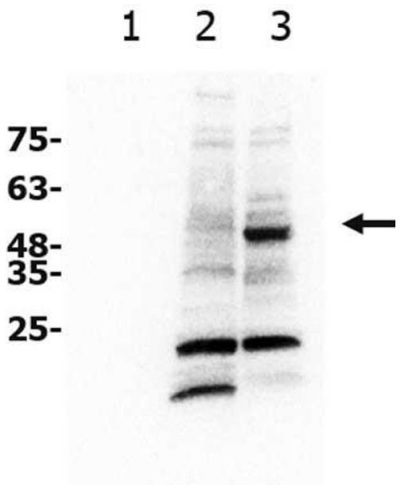
| Product cited in: | Tamiya, Urushihara, Shizuma, Ogawa, Nakai, Wakamatsu, Takenaka, Kakunaga: "SHARPIN Enhances Ferroptosis in Synovial Sarcoma Cells via NF-κB- and PRMT5-Mediated PGC1α Reduction." in: **Cancers**, Vol. 15, Issue 13, (2023) (PubMed). |

## Images



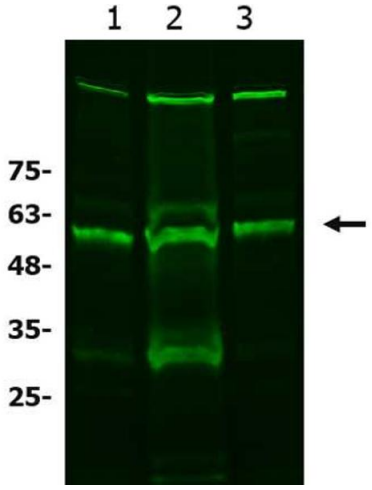
**Flow Cytometry**

**Image 1.** Flow Cytometry of rabbit anti-xCT antibody Flow Cytometry of rabbit anti-xCT antibody. Cells: breast carcinoma cells Primary antibody: xCT antibody at 1.0 µg/mL for one hour at 4°C. Secondary antibody: Donkey anti-Rabbit IgG488 Antibody p/n at 1 ug/ml in 200 ul for one hour on ice.




**Western Blotting**

**Image 2.** Western Blot of Rabbit anti-xCT antibody Western Blot of Rabbit anti-xCT antibody. Lane 1: recombinant BCL3 (unrelated negative control). Lane 2: NIH 3T3 WCL . Lane 3: A549 WCL . Load: 10 µg per lane. Primary antibody: xCT antibody at 1:1000 for overnight at 4°C. Secondary antibody: goat anti-rabbit secondary HRP antibody at 1:20,000 for one hour at RT. Block: 5% BSA blocking buffer one hour at RT. Predicted/Observed size: 56 kda. Other band(s): xCT processing caused by dimerization, glycosylation, and/or phosphorylation.




**Western Blotting**

**Image 3.** Western Blot of Rabbit anti-xCT antibody Western Blot of Rabbit anti-xCT antibody. Lane 1: A549 WCL . Lane 2: HCT-116 WCL . Lane 3: HeLa WCL . Load: 10 µg per lane. Primary antibody: xCT antibody at 1:1000 for overnight at 4°C. Secondary antibody: donkey anti-rabbit secondary488 antibody at 1:20,000 for one hour at RT. Block: BlockOut blocking buffer one hour at RT. Predicted/Observed size: 56 kda. Other band(s): xCT processing caused by dimerization, glycosylation, and/or phosphorylation.

Please check the product details page for more images. Overall 4 images are available for ABIN6655337.