

Product datasheet

Anti-xCT antibody ab216876

4 Images

Overview

Product name	Anti-xCT antibody
Description	Rabbit polyclonal to xCT
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF, Flow Cyt
Species reactivity	Reacts with: Human
Immunogen	This information is considered to be commercially sensitive.
Positive control	WB: A549, HCT 116 and HeLa whole cell lysates. ICC/IF: PC-3 cells. Flow Cytometry: Human breast carcinoma cells.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.01% Sodium azide Constituent: PBS
Purity	Affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab216876** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

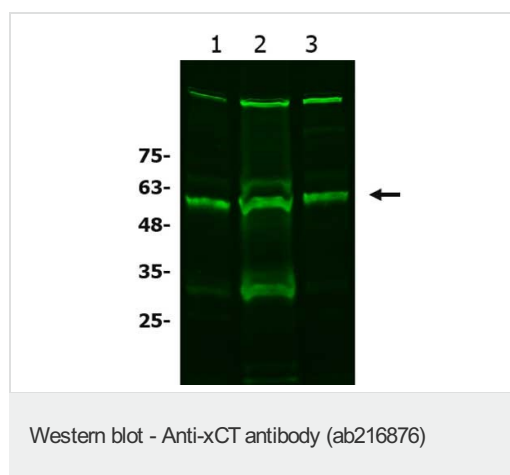
Application	Abreviews	Notes
WB		1/1000. Predicted molecular weight: 55 kDa.
ICC/IF		Use a concentration of 10 µg/ml.

Application	Abreviews	Notes
Flow Cyt		Use a concentration of 1 µg/ml.

Target

Function	Sodium-independent, high-affinity exchange of anionic amino acids with high specificity for anionic form of cystine and glutamate.
Sequence similarities	Belongs to the amino acid-polyamine-organocation (APC) superfamily. L-type amino acid transporter (LAT) (TC 2.A.3.8) family.
Cellular localization	Membrane.
Form	xCT has a predicted molecular weight of 55 kDa; however it has a high number of hydrophobic residues which may affect the migration of the protein in SDS-PAGE. Endogenous monomeric xCT is expected to migrate at ~35 kDa and modified-xCT is expected to migrate at ~55 kDa (PMID: 17035536)

Images



All lanes : Anti-xCT antibody (ab216876) at 1/1000 dilution

Lane 1 : A549 (human lung carcinoma cell line) whole cell lysate

Lane 2 : HCT 116 (human colorectal carcinoma cell line) whole cell lysate

Lane 3 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : anti-rabbit secondary DyLight 488 antibody at 1/20000 dilution

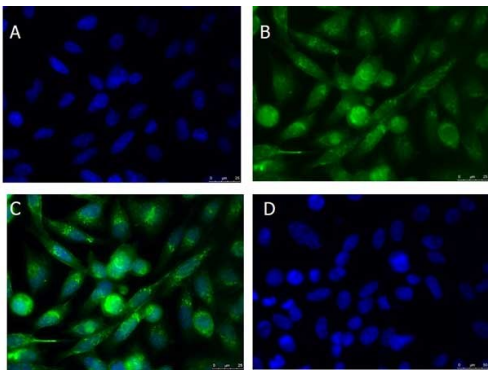
Predicted band size: 55 kDa

Observed band size: 56 kDa

[why is the actual band size different from the predicted?](#)

Dilution buffer: 0.01% sodium azide in PBS.

xCT processing caused by dimerization, glycosylation, and/or phosphorylation may cause other bands.



Immunocytochemistry/ Immunofluorescence - Anti-xCT antibody (ab216876)

Immunofluorescent analysis of PC-3 (human prostate adenocarcinoma cell line) cells labeling xCT with ab216876 at 10 µg/mL for 1 hour, followed by anti-Rabbit IgG DyLight™ 488 Conjugated Preadsorbed secondary antibody at 5 µg/mL for 1 hour at RT (green). Cells were fixed with 100% methanol.

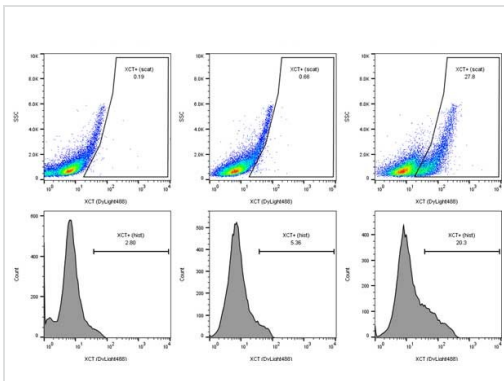
The nuclear counter stain is DAPI (blue).

A: DAPI

B: Primary followed by Anti-rabbit IgG DyLight™ 488

C: Merged images

D: Secondary only control



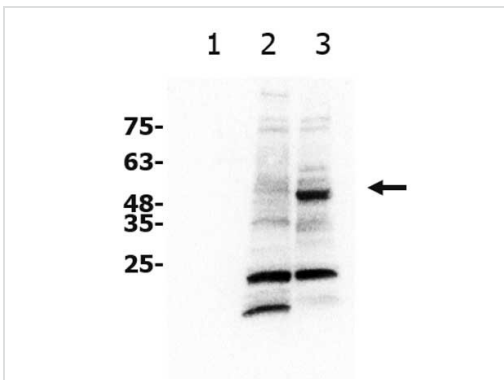
Flow Cytometry - Anti-xCT antibody (ab216876)

Flow cytometric analysis of human breast carcinoma cells labeling xCT with ab216876 at 1 µg/mL for 1 hour at 4°C. Rabbit IgG Antibody DyLight™488 Conjugated pre-adsorbed secondary antibody was used at 1 µg/mL for one hour on ice.

Left panels: Unstained.

Middle panels: Secondary antibody only.

Right panels: Primary and secondary antibodies.



Western blot - Anti-xCT antibody (ab216876)

All lanes : Anti-xCT antibody (ab216876) at 1/1000 dilution

Lane 1 : Recombinant Bcl3 (unrelated negative control)

Lane 2 : NIH/3T3 (mouse embryonic fibroblast cell line) whole cell lysate

Lane 3 : A549 (human lung carcinoma cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : anti-rabbit secondary HRP antibody at 1/70000 dilution

Predicted band size: 55 kDa

Observed band size: 56 kDa [why is the actual band size different from the predicted?](#)

Exposure time: 15-30 seconds.

Blocking buffer: 5% BSA.

Dilution buffer: 0.01% sodium azide in PBS.

xCT processing caused by dimerization, glycosylation, and/or phosphorylation may cause other bands.

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