abcam

Product datasheet

Anti-xCT antibody [EPR8290(2)] ab175186



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Overview

Product name Anti-xCT antibody [EPR8290(2)]

Description Rabbit monoclonal [EPR8290(2)] to xCT

Host species Rabbit

Tested applications Suitable for: WB, IP

Unsuitable for: Flow Cyt,ICC/IF or IHC-P

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen Synthetic peptide within Human xCT aa 1-100 (Cysteine residue). The exact sequence is

proprietary.

Database link: **Q9UPY5**

(Peptide available as ab178606)

Positive control WB: A549, HepG2, U87-MG and BxPC-3 cell lysates. Human, at and mouse heart tissue lysates

IP: HepG2 cells lysate.

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity - Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

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

Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

Purity Protein A purified

Clonality Monoclonal

1

Clone number EPR8290(2)

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab175186 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	★★★★★ (4)	1/1000 - 1/10000. Predicted molecular weight: 55 kDa.
IP		1/10 - 1/100.

Application notes Is unsuitable for Flow Cyt,ICC/IF or IHC-P.

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



Western blot - Anti-xCT antibody [EPR8290(2)]

(ab175186)

All lanes : Anti-xCT antibody [EPR8290(2)] (ab175186) at 1/10000 dilution (Purified)

Lane 1: A549 (Human lung carcinoma epithelial cell) whole cell

lysates

Lane 2: Human heart lysates

Lane 3: Mouse heart lysates

Lane 4: Rat heart lysates

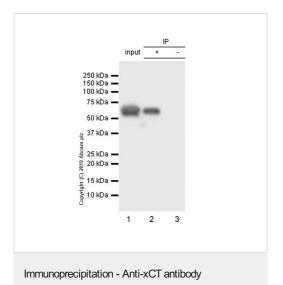
Lysates/proteins at 15 µg per lane.

Secondary

All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000

dilution

Predicted band size: 55 kDa
Observed band size: 55 kDa



[EPR8290(2)] (ab175186)

ab175186 (purified) at 1:20 dilution (0.5 μ g) immunoprecipitating xCT in HepG2 whole cell lysate.

Lane 1 (input): HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysate $10\mu g$

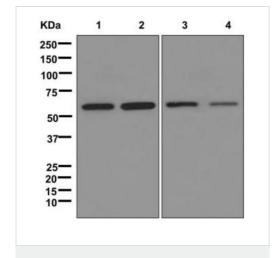
Lane 2 (+): ab175186 & HepG2 whole cell lysate

Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab175186 in HepG2 whole cell lysate

For western blotting, VeriBlot for IP Detection Reagent (HRP)

(ab131366) was used for detection at 1:1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.



All lanes : Anti-xCT antibody [EPR8290(2)] (ab175186) at 1/1000 dilution

Lane 1 : A549 (Human lung carcinoma cell line) cell lysates

Lane 2 : HepG2 (Human liver hepatocellular carcinoma cell line) cell lysates

Lane 3: U-87 MG (Human glioblastoma-astrocytoma epithelial cell line) cell lysates

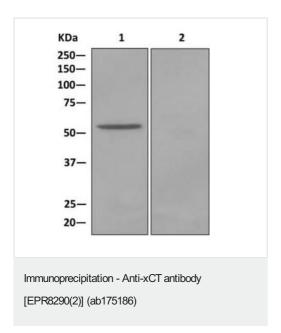
Lane 4: BxPC-3 (Human pancreas adenocarcinoma cell line) cell lysates

Lysates/proteins at 10 µg per lane.

Predicted band size: 55 kDa

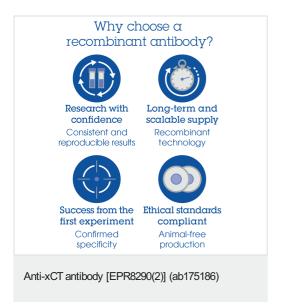
Western blot - Anti-xCT antibody [EPR8290(2)] (ab175186)

This image was generated using the unpurified version of the product.



Western blot analysis on immunoprecipitation pellet from (Lane 1) HepG2 cells lysate or (Lane 2) 1 X PBS (negative control) using ab175186 at a 1/10 dilution and HRP-conjugated anti-rabbit lgG preferentially detecting the non-reduced form of rabbit lgG.

This image was generated using the unpurified version of the product.



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