abcam

Product datasheet

Anti-BST2/Tetherin antibody [EPR20202-169] ab243229

Recombinant RabMAb

2 References 8 Images

Overview

Product name	Anti-BST2/Tetherin antibody [EPR20202-169]
Description	Rabbit monoclonal [EPR20202-169] to BST2/Tetherin
Host species	Rabbit
Tested applications	**Suitable for:** WB, IP, Flow Cyt, ICC/IF **Unsuitable for:** IHC-P
Species reactivity	**Reacts with:** Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HeLa, whole cell lysate, in the loading buffer containing DTT; K562 whole cell lysate, in the loading buffer containing DTT; U-937 whole cell lysate. ICC/IF: HeLa and U-937 cells. Flow Cyt: HeLa and U-937 cells. IP: HeLa whole cell 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	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR20202-169

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab243229 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. Detects a band of approximately 35, 70 kDa (predicted molecular weight: 20 kDa).
IP		1/30.
Flow Cyt		1/500.
ICC/IF		1/100.

Application notes Is unsuitable for IHC-P.

Target

Function May be involved in the sorting of secreted proteins (By similarity). May be involved in pre-B-cell growth. Antiretroviral defense protein, that blocks release of retrovirus from the cell surface. Depleted unpon HIV-1 infection by viral VPU protein through 20S proteasome degradation. Depleted upon infection by human Kaposi's sarcoma-associated herpesvirus (KSHV) through ubiquitination and subsequent degradation. May play a role in B-cell activation in rheumatoid arthritis.

Tissue specificity Predominantly expressed in liver, lung, heart and placenta. Lower levels in pancreas, kidney, skeletal muscle and brain. Overexpressed in multiple myeloma cells. Highly expressed during B-cell development, from pro-B precursors to plasma cells. Highly expressed on T-cells, monocytes, NK cells and dendritic cells (at protein level).

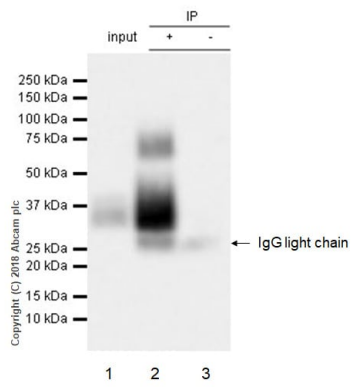
Sequence similarities Belongs to the tetherin family.

Domain The extracellular coiled coil domain is important for virus retention at the cell surface and prevention of virus spreading.

Post-translational modifications Monoubiquitinated by KSHV E3 ubiquitin-protein ligase K5, leading to its targeting to late endosomes and degradation.

Cellular localization Golgi apparatus > trans-Golgi network. Cell membrane. Cell membrane. Late endosome. Targeted to late endosomes upon KSHV infection and subsequent ubiquitination. Targeted to the trans-Golgi network by viral VPU protein.

Images

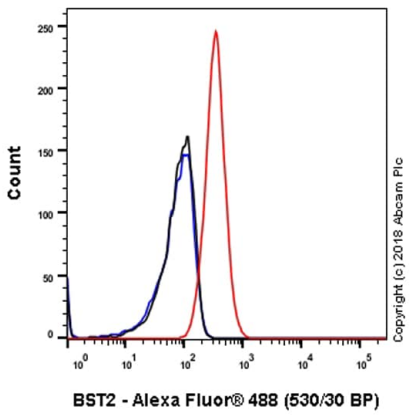


Immunoprecipitation - Anti-BST2/Tetherin antibody [EPR20202-169] (ab243229)

BST2/Tetherin was immunoprecipitated from 0.35 mg HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate with ab243229 at 1/30 dilution. Western blot was performed on the immunoprecipitate using ab243229 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used for detection at 1/5000 dilution.

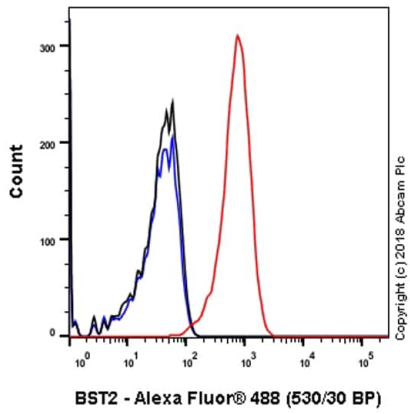
Lane 1: HeLa whole cell lysate 10 µg (input).
Lane 2: ab243229 IP in HeLa whole cell lysate.
Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab243229 in HeLa whole cell lysate.

Blocking/Diluting buffer and concentration: 5% NFDM/TBST
Exposure time: 3 seconds.



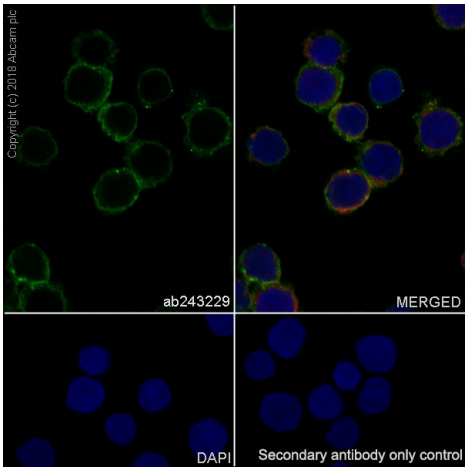
Flow Cytometry - Anti-BST2/Tetherin antibody [EPR20202-169] (ab243229)

Flow cytometric analysis of U-937 (human histiocytic lymphoma cell line) cell line labeling BST2/Tetherin with ab243229 at 1/500 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/2000 dilution was used as the secondary antibody. Gated on viable cells.



Flow Cytometry - Anti-BST2/Tetherin antibody [EPR20202-169] (ab243229)

Flow cytometric analysis of HeLa (Human epithelial cell line from cervix adenocarcinoma) cell line labeling BST2/Tetherin with ab243229 at 1/500 dilution (Red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/2000 dilution was used as the secondary antibody. Gated on viable cells.

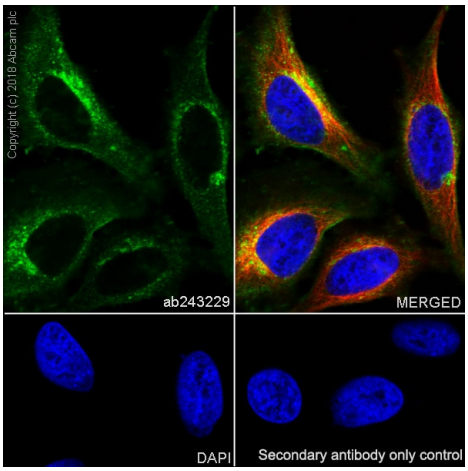


Immunocytochemistry/ Immunofluorescence - Anti-BST2/Tetherin antibody [EPR20202-169] (ab243229)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized U-937 (human histiocytic lymphoma cell line) cells labeling BST2/Tetherin with ab243229 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining in U-937 cells (PMID: 20529266).

The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-BST2/Tetherin antibody [EPR20202-169] (ab243229)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (human epithelial cell line from cervix adenocarcinoma) cells labeling BST2/Tetherin with ab243229 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining in HeLa cells (PMID: 20529266).

The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution.

Western blot - Anti-BST2/Tetherin antibody [EPR20202-169] (ab243229)

Anti-BST2/Tetherin antibody [EPR20202-169] (ab243229) at 1/1000 dilution + U937 (human histiocytic lymphoma cell line) whole cell lysate at 20 µg

Secondary

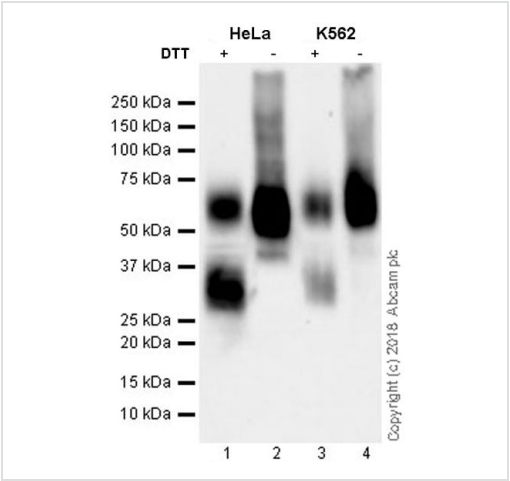
Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 20 kDa

Observed band size: 35,70 kDa

Blocking/Diluting buffer and concentration: 5% NFDM/TBST.

The expression profile/ molecular weight observed is consistent with what has been described in the literature (PMID: 19737401)



Western blot - Anti-BST2/Tetherin antibody [EPR20202-169] (ab243229)

All lanes : Anti-BST2/Tetherin antibody [EPR20202-169] (ab243229) at 1/1000 dilution

Lane 1 : HeLa (human epithelial cell line from cervix adenocarcinom), whole cell lysate, in the loading buffer containing DTT

Lane 2 : HeLa whole cell lysate in the loading buffer without DTT

Lane 3 : K562 (human chronic myelogenous leukemia lymphoblast), whole cell lysate, in the loading buffer containing DTT

Lane 4 : K562 whole cell lysate in the loading buffer without DTT

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 20 kDa

Observed band size: 35,70 kDa

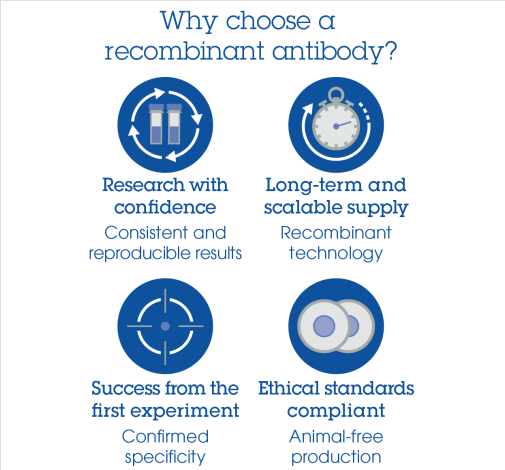
Exposure time: 48 seconds

Blocking/Diluting buffer and concentration: 5% NFDM/TBST

The expression profile/ molecular weight observed is consistent with what has been described in the literature (PMID: 19196977; PMID: 19737401).

BST2/Tetherin is a glycosylated protein, its calculated MW is 20kDa, and the observed MW is 35 kDa, which is consistent to the literature.

Both 35 and 70-kDa bands were detected under the reducing condition, whereas under the non-reducing condition, only the 70-kDa band was detected.



Anti-BST2/Tetherin antibody [EPR20202-169] (ab243229)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors