abcam

Product datasheet

Anti-BST2/Tetherin antibody [EPR5648] ab134061





★★★★ 5 Abreviews 6 References 5 Images

Overview

Product name Anti-BST2/Tetherin antibody [EPR5648]

Description Rabbit monoclonal [EPR5648] to BST2/Tetherin

Host species Rabbit

Specificity For Mouse and Rat species, we have preliminary internal testing data to indicate this antibody

may not react. Please contact us for more information.

Tested applications Suitable for: WB

Unsuitable for: ICC/IF or IHC-P

Species reactivity Reacts with: Human

Synthetic peptide corresponding to Human BST2/Tetherin aa 100-200 (extracellular). **Immunogen**

Database link: Q10589

Positive control WB: A431, U937, Molt-4, Human spleen and HeLa lysates; Human kidney tissue.

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**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

Properties

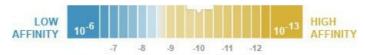
Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Stable for 12 months at -20°C.

 $K_D = 1.18 \times 10^{-10} M$ Dissociation constant (K_D)

10-10



Learn more about K_D

Storage buffer pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA

Purity Protein A purified

Clone number Monoclonal EPR5648

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab134061 in the following tested applications.

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

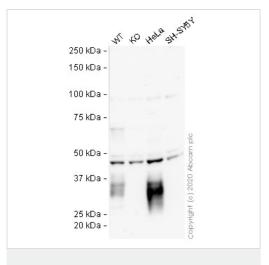
Application	Abreviews	Notes
WB	★★★★★(2)	1/1000 - 1/10000. Predicted molecular weight: 20 kDa.

Application notes Is unsuitable for ICC/IF or 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



Western blot - Anti-BST2/Tetherin antibody [EPR5648] (ab134061)

All lanes : Anti-BST2/Tetherin antibody [EPR5648] (ab134061) at 1/1000 dilution

Lane 1: Wild-type A431 cell lysate

Lane 2: BST2 knockout A431 cell lysate

Lane 3: HeLa (Human epithelial cell line from cervix

adenocarcinoma) whole cell lysate

Lane 4: SH-SY5Y (Human neuroblastoma cell line from bone

marrow) whole cell lysate

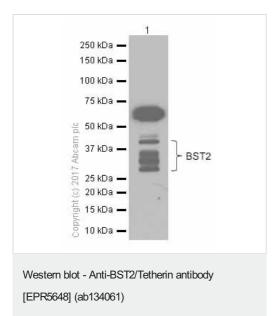
Lysates/proteins at 40 µg per lane.

Performed under reducing conditions.

Predicted band size: 20 kDa **Observed band size:** 30 kDa

Exposure time: 20 minutes

ab134061 was shown to react with BST2 in A431 wild-type cells in western blot. Loss of signal was observed when BST2 knockout sample was used. Membranes were blocked in 3% milk in TBS-T (0.1% Tween®) before incubation with ab134061 overnight at 4°C at a 1 in 1000 dilution and ab184095 (Mouse Anti-GAPDH antibody [mAbcam 9484] - Alexa Fluor® 680) at a 1 in 1000 dilution. Blots were incubated with HRP conjugated Goat anti-Rabbit (H+L) secondary antibody at 1/5000 for 1 hour at room temperature before development with Optiblot ECL reagent (ab133456) and imaging.

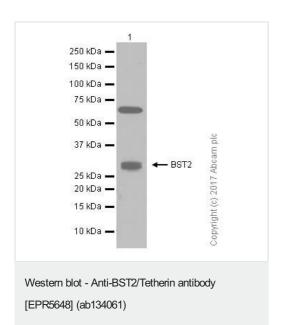


Anti-BST2/Tetherin antibody [EPR5648] (ab134061) at 1/1000 dilution + HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate at 20 μg

Secondary

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

Predicted band size: 20 kDa **Observed band size:** 28-40 kDa



Anti-BST2/Tetherin antibody [EPR5648] (ab134061) at 1/1000 dilution (Purified) + Human fetal spleen whole cell lysates at 15 µg

Secondary

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

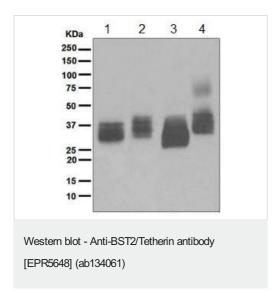
Predicted band size: 20 kDa **Observed band size:** 30 kDa

Exposure time: 3 minutes

Blocking/Diluting buffer and concentration 5% NFDM/TBST

This antibody detects a non-specific band at 65 KDa.

This image was produced using unpurified antibody.



All lanes : Anti-BST2/Tetherin antibody [EPR5648] (ab134061) at 1/1000 dilution

Lane 1: U937 lysate Lane 2: Molt-4 lysate

Lane 3: Human spleen lysate

Lane 4: HeLa lysate

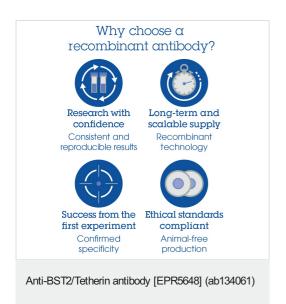
Lysates/proteins at 10 µg per lane.

Secondary

All lanes: HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 20 kDa

This image was produced using unpurified antibody.



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