abcam

Product datasheet

Anti-USP14/TGT antibody [EPR15943] - C-terminal ab192618

Recombinant RabMAb

★★★★★ 1 Abreviews 6 References 6 Images

Overview

Product name	Anti-USP14/TGT antibody [EPR15943] - C-terminal
Description	Rabbit monoclonal [EPR15943] to USP14/TGT - C-terminal
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), WB, ICC/IF
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	HCT-116, HeLa, Jurkat, 293T, C6 and RAW 264.7 cell lysates; HeLa and Jurkat cells. WB: Wild-type HeLa cell lysate, USP14 knockout HeLa 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: 59% PBS, 0.05% BSA, 40% Glycerol
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR15943

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab192618 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
Flow Cyt (Intra)		1/70. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★★ (1)	1/1000 - 1/10000. Detects a band of approximately 56 kDa (predicted molecular weight: 56 kDa).
ICC/IF		1/70.

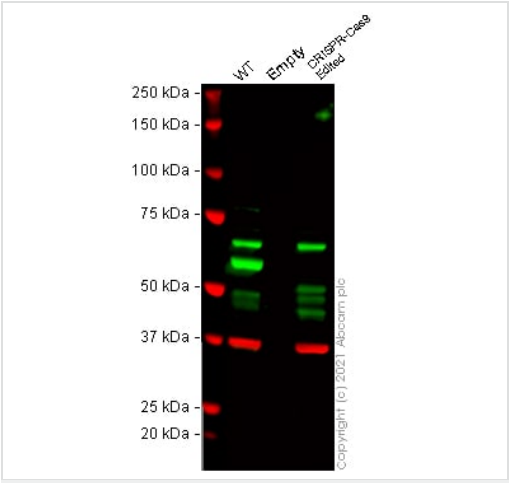
Target

Function Proteasome-associated deubiquitinase which releases ubiquitin from the proteasome targeted ubiquitinated proteins. Ensures the regeneration of ubiquitin at the proteasome. Is a reversibly associated subunit of the proteasome and a large fraction of proteasome-free protein exists within the cell. Required for the degradation of the chemokine receptor CXCR4 which is critical for CXCL12-induced cell chemotaxis. Serves also as a physiological inhibitor of endoplasmic reticulum-associated degradation (ERAD) under the non-stressed condition by inhibiting the degradation of unfolded endoplasmic reticulum proteins via interaction with ERN1. Indispensable for synaptic development and function at neuromuscular junctions (NMJs).

Sequence similarities Belongs to the peptidase C19 family. USP14/UBP6 subfamily.
Contains 1 ubiquitin-like domain.

Cellular localization Cytoplasm. Cell membrane.

Images



Western blot - Anti-USP14/TGT antibody [EPR15943] - C-terminal (ab192618)

All lanes : Anti-USP14/TGT antibody [EPR15943] - C-terminal (ab192618) at 1/1000 dilution

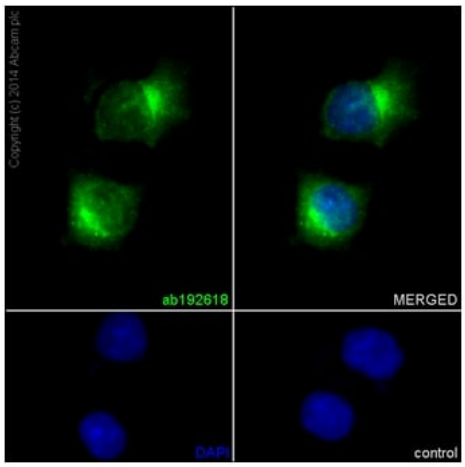
Lane 1 : Wild-type HeLa cell lysate
Lane 2 : USP14 CRISPR-Cas9 edited HeLa cell lysate
Lane 3 : USP14 knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

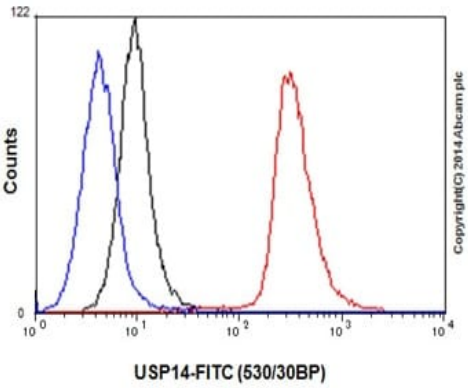
Predicted band size: 56 kDa
Observed band size: 63 kDa

False colour image of Western blot: Anti-USP14/TGT antibody [EPR15943] - C-terminal staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (**ab8245**) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab192618 was shown to bind specifically to USP14/TGT. A band was observed at 63 kDa in wild-type HeLa cell lysates with no signal observed at this size in USP14 CRISPR-Cas9 edited cell line **ab266854** (CRISPR-Cas9 edited cell lysate **ab257787**). The band observed in the CRISPR-Cas9 edited lysate lane below 63 kDa is likely to represent a truncated form of USP14/TGT. This has not been investigated further and the functional properties of the gene product have not been determined. To generate this image, wild-type and USP14 CRISPR-Cas9 edited HeLa cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 5 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) at 1/20000 dilution.



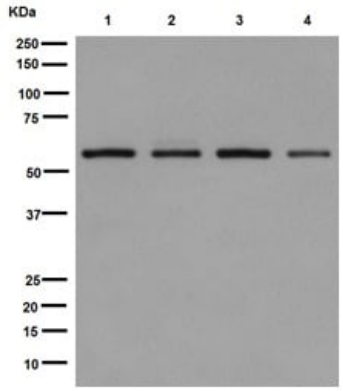
Immunocytochemistry/ Immunofluorescence - Anti-USP14/TGT antibody [EPR15943] - C-terminal (ab192618)

Immunofluorescent analysis of HeLa cells (4% Paraformaldehyde-fixed, 0.1% tritonX-100 permeabilized) labeling USP14/TGT with ab192618 at 1/70 dilution (5 µg/ml). A Goat anti rabbit IgG (Alexa Fluor488) at 1/400 dilution (**ab150077**) was used as secondary antibody. Counterstain: DAPI.



Flow Cytometry (Intracellular) - Anti-USP14/TGT antibody [EPR15943] - C-terminal (ab192618)

Intracellular flow cytometric analysis of Jurkat cells (2% paraformaldehyde-fixed)labeling USP14/TGT with ab192618 at 1/70 dilution (red) or a rabbit IgG (negative) (black), unlabeled cells (blue) followed by Goat anti rabbit IgG (FITC) secondary at 1/150 dilution.



Western blot - Anti-USP14/TGT antibody [EPR15943] - C-terminal (ab192618)

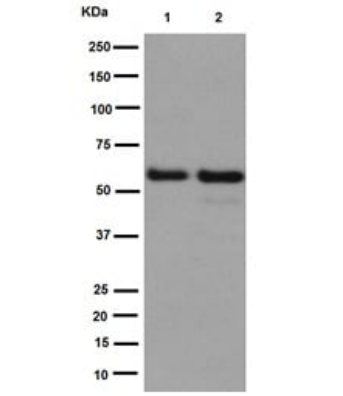
All lanes : Anti-USP14/TGT antibody [EPR15943] - C-terminal (ab192618) at 1/2000 dilution

Lane 1 : HeLa cell lysate
Lane 2 : 293T cell lysate
Lane 3 : Jurkat cell lysate
Lane 4 : HCT-116 cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution

Predicted band size: 56 kDa



Western blot - Anti-USP14/TGT antibody [EPR15943] - C-terminal (ab192618)

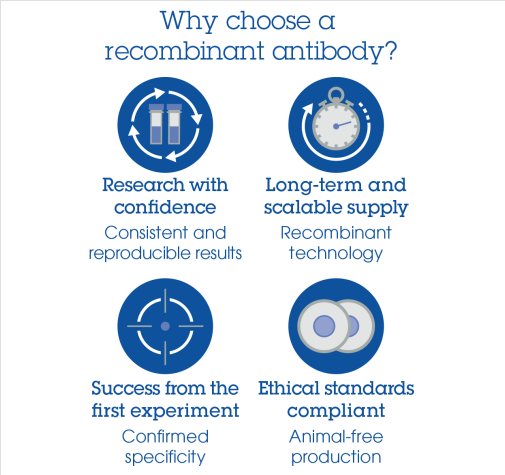
All lanes : Anti-USP14/TGT antibody [EPR15943] - C-terminal (ab192618) at 1/2000 dilution

Lane 1 : C6 cell lysate
Lane 2 : RAW 264.7 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution

Predicted band size: 56 kDa



Anti-USP14/TGT antibody [EPR15943] - C-terminal (ab192618)

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