abcam

Product datasheet

Anti-OTUB1 antibody [EPR13028(B)] - BSA and Azide free ab232581



リコンピナント

RabMAb

画像数 5

製品の概要

製品名 Anti-OTUB1 antibody [EPR13028(B)] - BSA and Azide free

製品の詳細 Rabbit monoclonal [EPR13028(B)] to OTUB1 - BSA and Azide free

由来種 Rabbit

アプリケーション 適用あり: WB, IP

適用なし: Flow Cyt,ICC/IF or IHC-P

種交差性 交差種: Mouse, Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: Wild-type HAP1, HeLa, MCF7, HepG2, HEK-293T, and HEK-293 cell lysates. Rat and

mouse heart tissue lysates. IP: HeLa cell lysate.

特記事項 ab232581 is the carrier-free version of ab175200.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

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

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

バッファー pH: 7.2

Constituent: PBS

キャリア・フリー はい

精製度 Protein A purified

ポリ/モノ モノクローナル

クローン名 EPR13028(B)

アイソタイプ lgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab232581の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		Use at an assay dependent concentration. Predicted molecular weight: 31 kDa.
IP		Use at an assay dependent concentration.

追加情報 Is unsuitable for Flow Cyt,ICC/IF or IHC-P.

ターゲット情報

機能

Hydrolase that can remove conjugated ubiquitin from proteins and plays an important regulatory role at the level of protein turnover by preventing degradation. Regulator of T-cell anergy, a phenomenon that occurs when T-cells are rendered unresponsive to antigen rechallenge and no longer respond to their cognate antigen. Acts via its interaction with RNF128/GRAIL, a crucial inductor of CD4 T-cell anergy. Isoform 1 destabilizes RNF128, leading to prevent anergy. In contrast, isoform 2 stabilizes RNF128 and promotes anergy. Surprisingly, it regulates RNF128-mediated ubiquitination, but does not deubiquitinate polyubiquitinated RNF128. Deubiquitinates estrogen receptor alpha (ESR1). Mediates deubiquitination of 'Lys-48'-linked polyubiquitin chains, but not 'Lys-63'-linked polyubiquitin chains. Not able to cleave di-ubiquitin. Also capable of removing NEDD8 from NEDD8 conjugates, but with a nuch lower preference compared to 'Lys-48'-linked ubiquitin.

組織特異性

lsoform 1 is ubiquitous. Isoform 2 is expressed only in lymphoid tissues such as tonsils, lymph nodes and spleen, as well as peripheral blood mononuclear cells.

配列類似性 Belongs to the peptidase C65 family.

Contains 1 OTU domain.

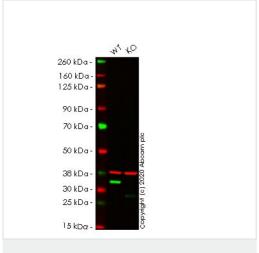
ドメイン

In addition to ubiquitin-binding at the Cys-91 active site, a proximal ubiquitin-binding site is also present at Cys-23 Occupancy of the active site is needed to enable tight binding to the second site. Distinct binding sites for the ubiquitins may allow to discriminate among different isopeptide linkages (i.e. 'Lys-48'-, 'Lys-63'-linked polyubiquitin) in polyubiquitin substrates and achieve linkage-specific deubiquitination.

細胞内局在

Cytoplasm.

画像



Western blot - Anti-OTUB1 antibody [EPR13028(B)]

- BSA and Azide free (ab232581)

All lanes : Anti-OTUB1 antibody [EPR13028(B)] (<u>ab175200</u>) at 1/1000 dilution

Lane 1: Wild-type HEK-293T cell lysate

Lane 2: OTUB1 knockout HEK-293T cell lysate

Lysates/proteins at 20 µg per lane.

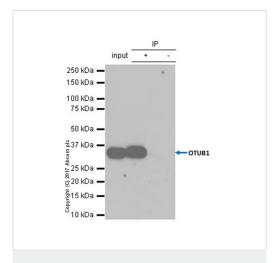
Performed under reducing conditions.

Predicted band size: 31 kDa **Observed band size:** 130 kDa

This data was developed using the same antibody clone in a different buffer formulation (<u>ab175200</u>).

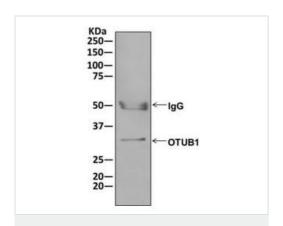
Lanes 1-2: Merged signal (red and green). Green - <u>ab175200</u> observed at 31 kDa. Red - loading control <u>ab8245</u> observed at 37 kDa.

<u>ab175200</u> Anti-OTUB1 antibody [EPR13028(B)] was shown to specifically react with OTUB1 in wild-type HEK-293T cells. Loss of signal was observed when knockout cell line <u>ab266551</u> (knockout cell lysate <u>ab257569</u>) was used. Wild-type and OTUB1 knockout samples were subjected to SDS-PAGE. <u>ab175200</u> and Anti-GAPDH antibody [6C5] - Loading Control (<u>ab8245</u>) were incubated overnight at 4°CC at 1 in 1000 Dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (<u>ab216773</u>) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preadsorbed (<u>ab216776</u>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunoprecipitation - Anti-OTUB1 antibody

[EPR13028(B)] - BSA and Azide free (ab232581)



Immunoprecipitation - Anti-OTUB1 antibody
[EPR13028(B)] - BSA and Azide free (ab232581)

ab175200 (purified) at 1:50 dilution (2ug) immunoprecipitating OTUB1 in HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate.

Lane 1 (input): HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10ug

Lane 2 (+): <u>ab175200</u> & HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

Lane 3 (-): Rabbit monoclonal IgG (<u>ab172730</u>) instead of <u>ab175200</u> in HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

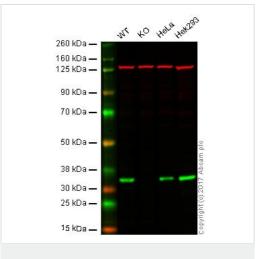
For western blotting, VeriBlot for IP Detection Reagent (HRP) (ab131366) was used for detection at 1:1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab175200).

Western blot analysis on immunoprecipitation pellet from MCF7 cell lysate labeling OTUB1 with unpurified <u>ab175200</u> at 1/10 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab175200</u>).



Western blot - Anti-OTUB1 antibody [EPR13028(B)]
- BSA and Azide free (ab232581)

All lanes : Anti-OTUB1 antibody [EPR13028(B)] (**ab175200**) at 1/1000 dilution

Lane 1: Wild-type HAP1 whole cell lysate

Lane 2: OTUB1 knockout HAP1 whole cell lysate

Lane 3: HeLa whole cell lysate

Lane 4: HEK-293 whole cell lysate

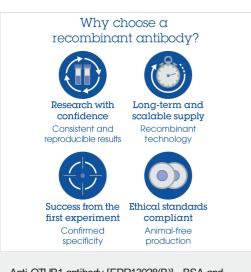
Lysates/proteins at 20 µg per lane.

Predicted band size: 31 kDa

Lanes 1 - 4: Merged signal (red and green). Green - <u>ab175200</u> observed at 35 kDa. Red - loading control, <u>ab18058</u>, observed at 130 kDa.

ab175200 was shown to specifically react with OTUB1 in wild type cells as signal was lost in OTUB1 knockout cells. Wild-type and OTUB1 knockout samples were subjected to SDS-PAGE.
ab175200 and ab18058 (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 1/1,000 dilution and 1/20,000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/20,000 dilution for 1 hour at room temperature before imaging.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab175200).



Anti-OTUB1 antibody [EPR13028(B)] - BSA and Azide free (ab232581)

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