abcam

Product datasheet

Human OTUB1 knockout HEK-293T cell lysate ab257569

画像数 4

製品の概要

製品名 Human OTUB1 knockout HEK-293T cell lysate

製品の概要

Knockout cell lysate achieved by CRISPR/Cas9.

Parental Cell Line HEK293T

Organism Human

Mutation description Knockout achieved by using CRISPR/Cas9, 19 bp deletion in exon 1 and Insertion of the selection

cassette in exon 1.

Passage number <20

Knockout validation Sanger Sequencing, Western Blot (WB)

Reconstitution notesTo use as WB control, resuspend the lyophilizate in 50 μL of LDS* Sample Buffer to have a final

concentration of 2 mg/ml. For reducing conditions, we recommend a final concentration of 0.1 M

DTT.

*Usage of SDS sample buffer is not recommended with these lyophilized lysates.

特記事項

Lysate preparation: Our lysates are made using RIPA buffer to which we add a protease inhibitor cocktail and phosphatase inhibitor cocktail (ratio: 300:100:10). *This means that the protein of interest is denatured.* If you require a native form of the protein please use the live cell version - found here. Please refer to our lysis protocol for further details on how our lysates are prepared.

User storage instructions: Lyophilizate may be stored at 4°C. After reconstitution, store at -20°C for short-term storage or -80°C for long-term storage.

Access thousands of knockout cell lysates, generated from commonly used cancer cell lines.

See here for more information on knockout cell lysates.

Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances.

It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

This product is subject to limited use licenses from The Broad Institute, ERS Genomics Limited and Sigma-Aldrich Co. LLC, and is developed with patented technology. For full details of the licenses and patents please refer to our <u>limited use license</u> and <u>patent pages</u>.

アプリケーション **適用あり**: WB

1

製品の特性

保存方法

Store at -80°C. Please refer to protocols.

内容	1 kit
ab260285 - Human OTUB1 knockout HEK293T cell lysate	1 x 100µg
ab255553 - Human wild-type HEK293T cell lysate	1 x 100µg

Cell type epithelial

STR Analysis Amelogenin X D5S818: 8, 9 D13S317: 12, 14 D7S820: 11 D16S539: 9, 13 vWA: 16, 19 TH01:

7, 9.3 TPOX: 11 CSF1PO: 11, 12

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

 $lso form \ 1 \ is \ ubiquitous. \ lso form \ 2 \ is \ expressed \ only \ in \ lymphoid \ tissues \ such \ as \ tonsils, \ lymphoid \ lymphoid \ tonsils, \ lymphoid \ lymphoi$

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.

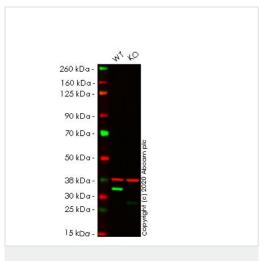
細胞内局在

Cytoplasm.

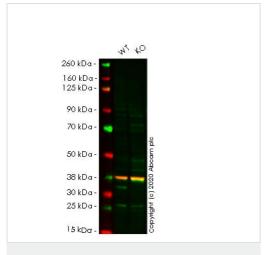
アプリケーション

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ab257569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.



Western blot - Human OTUB1 knockout HEK293T cell Ivsate (ab257569)



Western blot - Human OTUB1 knockout HEK293T cell lysate (ab257569)

Lane 1: Wild-type HEK-293T cell lysate (20 µg)

Lane 2: OTUB1 knockout HEK-293T cell lysate (20 µg)

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.

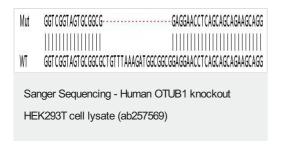
ab175200 Anti-OTUB1 antibody [EPR13028(B)] was shown to specifically react with OTUB1 in wild-type HEK-293T cells. Loss of signal was observed when knockout cell line ab266551 (knockout cell lysate ab257569) was used. Wild-type and OTUB1 knockout samples were subjected to SDS-PAGE. ab175200 and Anti-GAPDH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

Lane 1: Wild-type HEK-293T cell lysate (20 µg)

Lane 2: OTUB1 knockout HEK-293T cell lysate (20 µg)

Lanes 1-2: Merged signal (red and green). Green - <u>ab101471</u> observed at 130 kDa. Red - loading control <u>ab8245</u> observed at 37 kDa.

ab101471 Anti-OTUB1 antibody was shown to specifically react with OTUB1 in wild-type HEK-293T cells. Loss of signal was observed when knockout cell line ab266551 (knockout cell lysate ab257569) was used. Wild-type and OTUB1 knockout samples were subjected to SDS-PAGE. ab101471 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated overnight at 4°C at 1 in 10000 ug/ml and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Allele-1: 19 bp deletion in exon 1

Mut	AAGCGGTCGGTAGTGCGGCG*****! ns er	tion******CTGTTTAAAGATGGCGGCGG		
WT	AAGCGGT CGGT AGT GCGGCG	CTGTTTAAAGATGGCGGCGG		
_				
Sanger Sequencing - Human OTUB1 knockout				
HEK293T cell lysate (ab257569)				

Allele-2: Insertion of the selection cassette in exon 1

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.co.jp/abpromise or contact our technical team.

Terms and conditions

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