abcam

Product datasheet

Anti-USP9x antibody ab19879



★★★★★ 1 Abreviews 17 References 画像数 6

製品の概要

製品名 Anti-USP9x antibody

製品の詳細 Rabbit polyclonal to USP9x

由来種 Rabbit

特異性 ab19879 detects 289kDa full length USP9X Human protein (Q93008) in WB on Caco2 Lysate. All

detected bands are quenched by the immunizing peptide **ab20617**

アプリケーション 適用あり: ICC/IF, IP, ICC, IHC-Fr, WB, IHC (PFA fixed)

種交差性 交差種: Mouse, Rat, Human

免疫原 Synthetic peptide conjugated to KLH derived from within residues 1 - 100 of Human USP9x.

Immunogen の所有権に関して

ポジティブ・コントロール ICC: Hek293 cells

特記事項

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

バッファー pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

1

精製度 Immunogen affinity purified

ポリ/モノ ポリクローナル

アイソタイプ IgG

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ab19879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
ICC/IF		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
ICC		Use a concentration of 5 μg/ml.
IHC-Fr	*** <u>*</u>	Use at an assay dependent concentration.
WB		Use a concentration of 1 μ g/ml. Detects a band of approximately 100,105, 290 kDa (predicted molecular weight: 54, 100,105, 290 kDa).
IHC (PFA fixed)		Use a concentration of 0.1 µg/ml.

ターゲット情報

機能 Deubiquitinase involved both in the processing of ubiquitin precursors and of ubiquitinated

proteins. May therefore play an important role regulatory role at the level of protein turnover by preventing degradation of proteins through the removal of conjugated ubiquitin. Essential component of TGF-beta/BMP signaling cascade. Regulates chromosome alignment and segregation in mitosis by regulating the localization of BIRC5/survivin to mitotic centromeres. Specifically hydrolyzes both 'Lys-29'- and 'Lys-33'-linked polyubiquitins chains. Specifically deubiquitinates monoubiquitinated SMAD4, opposing the activity of E3 ubiquitin-protein ligase

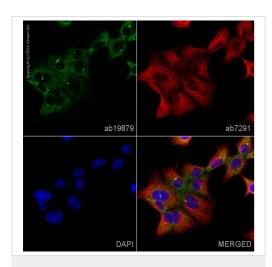
TRIM33.

組織特異性 Widely expressed in embryonic and adult tissues.

配列類似性 Belongs to the peptidase C19 family.

細胞内局在 Cytoplasm.

画像



Immunocytochemistry - Anti-USP9x antibody (ab19879)

460 kDa - 288 kBa - 171 kDa - 117 kDa - 117 kDa - 288 kBa - 288 kB

Western blot - Anti-USP9x antibody (ab19879)

55 kDa

ab19879 staining USP9x in Hek293 cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab19879 at 1µg/ml and ab7291, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with ab150081, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in green) and ab150080, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 594) at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue). Also suitable in cells fixed with 4% paraformaldehyde (10 min).

Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.

All lanes: Anti-USP9x antibody (ab19879) at 1 µg/ml

Lane 1: Wild-type HeLa cell lysate

Lane 2: USP9X knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

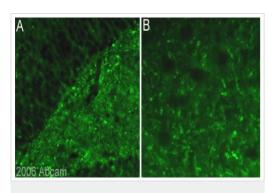
Predicted band size: 54, 100,105, 290 kDa

Observed band size: 290 kDa

Lanes 1-2: Merged signal (red and green). Green - ab19879 observed at 290 kDa. Red - Anti-alpha Tubulin antibody [DM1A] - Loading Control (ab7291) observed at 50 kDa.

ab19879 was shown to react with USP9x in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line ab265665 (knockout cell lysate ab257790) was used. Wild-type HeLa and USP9X knockout HeLa cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room

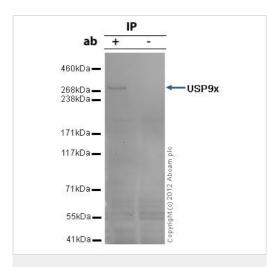
temperature in 0.1% TBST with 3% non-fat dried milk. ab19879 and Anti-alpha Tubulin antibody [DM1A] - Loading Control (ab7291) were incubated overnight at 4°C at a 1 μ g/ml and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye®800CW) preadsorbed (ab216773) 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.



Immunohistochemistry (PFA fixed) - Anti-USP9x antibody (ab19879)

This image is courtesy of Sophie Pezet, King's College London, United Kingdom

Immuofluorescent staining for USP9X in the rat hippocampus (dentate gyrus) using ab19879 (1/300 = 0.07 μ g/ml). Image is taken with X10 objective. ab19879 was incubated overnight at RT. Secondary antibody used was anti-rabbit Alexa fluor 488 (1/1000 for 2h at RT). Rats were intracardially perfused with paraformaldehyde 4%, brain tissue was post-fixed overnight in the same fixative, cryoprotected in 20% sucrose and frozen in OCT. 30 μ m coronal sections were cut on a cryostat for free floating IHC.



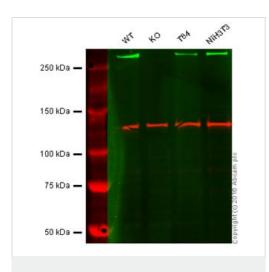
Immunoprecipitation - Anti-USP9x antibody (ab19879)

USP9x was immunoprecipitated using 0.5mg Caco2 whole cell extract, 5µg of Rabbit polyclonal to USP9x and 50µl of protein G magnetic beads (+). No antibody was added to the control (-). The antibody was incubated under agitation with Protein G beads for 10min, Caco2 whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

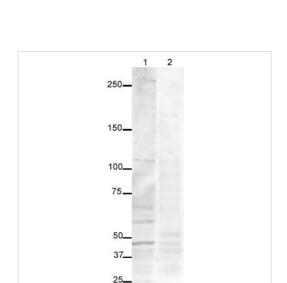
Proteins were eluted by addition of 40μ I SDS loading buffer and incubated for 10min at 70° C; 10μ I of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab19879.

Secondary: Mouse monoclonal [SB62a] Secondary Antibody to Rabbit IgG light chain (HRP) (ab99697).

Band: 290kDa: USP9x.



Western blot - Anti-USP9x antibody (ab19879)



Western blot - Anti-USP9x antibody (ab19879)

Lane 1: Wild-type HAP1 cell lysate (20 µg)

Lane 2: USP9x knockout HAP1 cell lysate (20 µg)

Lane 3: T84 cell lysate (20 µg)

Lane 4: NIH3T3 cell lysate (20 µg)

Lanes 1 to 4: Merged signal (red and green). Green - ab19879 observed at 290 kDa. Red - loading control, **ab181602** observed at 124 kDa.

ab19879 was shown to specifically react with USP9x when USP9x knockout samples were used. Wild-type and USP9x knockout samples were subjected to SDS-PAGE. ab9879 and ab181602 (loading control to GAPDH) were both diluted at 1 µg/ml and 1/10000 respectively and incubated overnight at 4°C. Blots were developed withGoat anti-Mouse IgG H&L (IRDye® 800CW) preadsorbed (ab216772) and Goat Anti-Rabbit IgG H&L (IRDye® 680RD) preadsorbed (ab216777) secondary antibodies at 1/10000 dilution for 1 h at room temperature before imaging.

All lanes: Anti-USP9x antibody (ab19879) at 1 µg/ml

Lane 1: Caco-2 whole cell lysate (ab3950)

Lane 2 : Caco-2 whole cell lysate (ab3950) with Human USP9x peptide (ab20617) at 1 μ g/ml

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Alexa Fluor Goat polyclonal to Rabbit lgG (700) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 54, 100,105, 290 kDa **Observed band size:** 100,105,290 kDa

Additional bands at: ~50-65 kDa. We are unsure as to the identity

of these extra bands.

ab19879 detects full length USP9x protein as well as a number of USP9x fragments in WB on Caco2 Lysate:

289kDa Human protein: Q93008 USP9X (Full length protein)
105kDa Human protein: Q6P468 - USP9X protein (Fragment)
Human protein

99.7kDa Human protein: Q59EZ5 - USP9X protein variant (Fragment).

53.9kDa Q86X58 - USP9X protein (Fragment).

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