# abcam

## Product datasheet

# Anti-SMURF 2 antibody [EP629Y3] ab53316



★★★★★ 2 Abreviews 15 References 画像数 4

### 製品の概要

免疫原

製品名 Anti-SMURF 2 antibody [EP629Y3]

製品の詳細 Rabbit monoclonal [EP629Y3] to SMURF 2

由来種 Rabbit

アプリケーション **適用あり:** WB

適用なし: Flow Cyt,ICC/IF,IHC-P or IP

種交差性 交差種: Human

交差が予測される動物種: Mouse, Rat 4

Synthetic peptide within Human SMURF 2 aa 200-300. The exact sequence is proprietary.

ポジティブ・コントロール WB: HeLa, U-2 OS and SH-SY-5Y cell lysates.

特記事項 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**.

## 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

精製度 Protein A purified

ポリモノ モノクローナル

クローン名 EP629Y3

## 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ab53316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	**** <u>(2)</u>	1/500 - 1/1000. Detects a band of approximately 86 kDa (predicted molecular weight: 86 kDa).

追加情報

Is unsuitable for Flow Cyt,ICC/IF,IHC-P or IP.

## ターゲット情報

機能

E3 ubiquitin-protein ligase which accepts ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and then directly transfers the ubiquitin to targeted substrates. Interacts with SMAD1 and SMAD7 in order to trigger their ubiquitination and proteasome-dependent degradation. In addition, interaction with SMAD7 activates autocatalytic degradation, which is prevented by interaction with SCYE1. Forms a stable complex with the TGF-beta receptor-mediated phosphorylated SMAD2 and SMAD3. In this way, SMAD2 may recruit substrates, such as SNON, for ubiquitin-mediated degradation. Enhances the inhibitory activity of SMAD7 and reduces the transcriptional activity of SMAD2. Coexpression of SMURF2 with SMAD1 results in considerable decrease in steady-state level of SMAD1 protein and a smaller decrease of SMAD2 level.

組織特異性

Widely expressed.

パスウェイ

Protein modification; protein ubiquitination.

配列類似性

Contains 1 C2 domain.

Contains 1 HECT (E6AP-type E3 ubiquitin-protein ligase) domain.

Contains 3 WW domains.

ドメイン

The second and third WW domains are responsible for interaction with the PY-motif of R-SMAD  $\,$ 

(SMAD1, SMAD2 and SMAD3).

The C2 domain is involved in autoinhibition of the catalytic activity by interacting with the HECT

domain.

翻訳後修飾

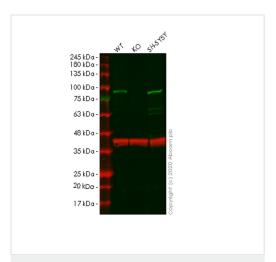
Auto-ubiquitinated and ubiquitinated in the presence of RNF11 and UBE2D1.

細胞内局在

Nucleus. Cytoplasm. Cell membrane. Membrane raft. Cytoplasmic in the presence of SMAD7.

Co-localizes with CAV1, SMAD7 and TGF-beta receptor in membrane rafts.

#### 画像



Western blot - Anti-SMURF 2 antibody [EP629Y3] (ab53316)

**All lanes :** Anti-SMURF 2 antibody [EP629Y3] (ab53316) at 1/1000 dilution

Lane 1: Wild-type HeLa cell lysate

Lane 2: SMURF2 knockout HeLa cell lysate

Lane 3: SH-SY5Y cell lysate

Lysates/proteins at 20 µg per lane.

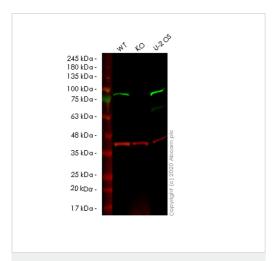
# **Secondary**

**All lanes :** Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/10000 dilution

**Predicted band size:** 86 kDa **Observed band size:** 86 kDa

**Lanes 1-3:** Merged signal (red and green). Green - ab53316 observed at 86 kDa. Red - loading control **ab8245** observed at 36 kDa.

ab53316 Anti-SMURF 2 antibody [EP629Y3] was shown to specifically react with SMURF 2 in wild-type HeLa cells. Loss of signal was observed when knockout cell line <a href="mailto:ab265231">ab265231</a> (knockout cell lysate <a href="mailto:ab257691">ab257691</a>) was used. Wild-type and SMURF 2 knockout samples were subjected to SDS-PAGE. ab53316 and Anti-GAPDH antibody [6C5] - Loading Control (<a href="mailto:ab8245">ab8245</a>) 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 (<a href="mailto:ab216773">ab216773</a>) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preadsorbed (<a href="mailto:ab216776">ab216776</a>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-SMURF 2 antibody [EP629Y3] (ab53316)

**All lanes :** Anti-SMURF 2 antibody [EP629Y3] (ab53316) at 1/1000 dilution

Lane 1: Wild-type HeLa cell lysate

Lane 2: SMURF2 knockout HeLa cell lysate

Lane 3: U-2 OS cell lysate

Lysates/proteins at 20 µg per lane.

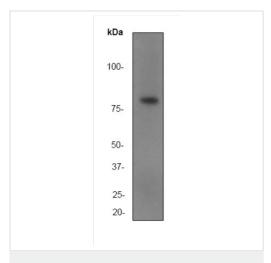
## Secondary

**All lanes :** Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (<u>ab216773</u>) at 1/10000 dilution

Predicted band size: 86 kDa Observed band size: 86 kDa

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ab53316 Anti-SMURF 2 antibody [EP629Y3] was shown to specifically react with SMURF 2 in wild-type HeLa cells. Loss of signal was observed when knockout cell line <a href="mailto:ab264806">ab264806</a> (knockout cell lysate <a href="mailto:ab257690">ab257690</a>) was used. Wild-type and SMURF 2 knockout samples were subjected to SDS-PAGE. ab53316 and Anti-GAPDH antibody [6C5] - Loading Control (<a href="mailto:ab8245">ab8245</a>) were incubated at room temperature for 2. 5 hours at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (<a href="mailto:ab216773">ab216773</a>) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (<a href="mailto:ab216776">ab216776</a>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



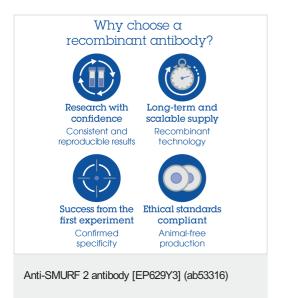
Western blot - Anti-SMURF 2 antibody [EP629Y3] (ab53316)

Anti-SMURF 2 antibody [EP629Y3] (ab53316) at 1/500 dilution + SH-SY-5Y cell lysate at 10  $\mu g$ 

## Secondary

Goat anti-rabbit HRP labeled at 1/2000 dilution

Predicted band size: 86 kDa Observed band size: 86 kDa



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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