

Anti-ITCH/AIP4 antibody [EPR4936] ab108515

KO 評価済 リコンビナント RabMAb

6 References 画像数 5

製品の概要

製品名	Anti-ITCH/AIP4 antibody [EPR4936]
製品の詳細	Rabbit monoclonal [EPR4936] to ITCH/AIP4
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: 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: K562, HeLa, HAP1 and 293T cell lysates. Rat and Mouse brain tissue lysates.
特記事項	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - 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: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
精製度	Tissue culture supernatant
ポリ/モノ	モノクローナル
クローン名	EPR4936
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee Abpromise保証は、 次のテスト済みアプリケーションにおけるab108515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		1/1000 - 1/10000. Detects a band of approximately 103 kDa (predicted molecular weight: 103 kDa).

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

ターゲット情報

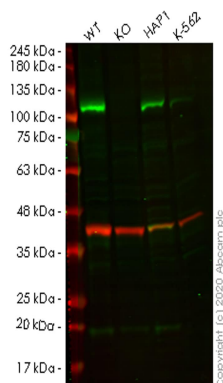
機能	Acts as an E3 ubiquitin-protein ligase which accepts ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and then directly transfers the ubiquitin to targeted substrates. It catalyzes 'Lys-29', 'Lys-48' and 'Lys-63'-linked ubiquitin conjugation. It is involved in the control of inflammatory signaling pathways. Is an essential component of a ubiquitin-editing protein complex, comprising also TNFAIP3, TAX1BP1 and RNF11, that ensures the transient nature of inflammatory signaling pathways. Promotes the association of the complex after TNF stimulation. Once the complex is formed, TNFAIP3 deubiquitinates 'Lys-63' polyubiquitin chains on RIPK1 and catalyzes the formation of 'Lys-48'-polyubiquitin chains. This leads to RIPK1 proteosomal degradation and consequently termination of the TNF- or LPS-mediated activation of NFkB1. Ubiquitinates RIPK2 by 'Lys-63'-linked conjugation and influences NOD2-dependent signal transduction pathways. Regulates the transcriptional activity of several transcription factors, and probably plays an important role in the regulation of immune response. Ubiquitinates NFE2 by 'Lys-63' linkages and is implicated in the control of the development of hematopoietic lineages. Critical regulator of T helper (TH2) cytokine development through its ability to induce JUNB ubiquitination and degradation (By similarity). Ubiquitinates SNX9. Ubiquitinates CXCR4 and HGS/HRS and regulates sorting of CXCR4 to the degradative pathway. It is involved in the negative regulation of MAVS-dependent cellular antiviral responses. Ubiquitinates MAVS through 'Lys-48'-linked conjugation resulting in MAVS proteosomal degradation. Involved in the regulation of apoptosis and reactive oxygen species levels through the ubiquitination and proteosomal degradation of TXNIP. Mediates the antiapoptotic activity of epidermal growth factor through the ubiquitination and proteosomal degradation of p15 BID. Targets DTX1 for lysosomal degradation and controls NOTCH1 degradation, in the absence of ligand, through 'Lys-29'-linked polyubiquitination.
組織特異性	Widely expressed.
パスウェイ	Protein modification; protein ubiquitination.
関連疾患	Defects in ITCH are the cause of syndromic multisystem autoimmune disease (SMAD) [MIM:613385]. SMAD is characterized by organomegaly, failure to thrive, developmental delay, dysmorphic features and autoimmune inflammatory cell infiltration of the lungs, liver and gut.
配列類似性	Contains 1 C2 domain. Contains 1 HECT (E6AP-type E3 ubiquitin-protein ligase) domain. Contains 4 WW domains.
翻訳後修飾	On T-cell activation, phosphorylation by the JNK cascade on serine and threonine residues surrounding the PRR domain accelerates the ubiquitination and degradation of JUN and JUNB. The increased ITCH catalytic activity due to phosphorylation by JNK1 may occur due to a

conformational change disrupting the interaction between the PRR/WW motifs domain and the HECT domain and, thus exposing the HECT domain (By similarity). Phosphorylation by FYN reduces interaction with JUNB and negatively controls JUN ubiquitination and degradation. Ubiquitinated; autopolyubiquitination with 'Lys-63' linkages which does not lead to protein degradation.

細胞内局在

Cell membrane. Cytoplasm. Nucleus. Associates with endocytic vesicles. May be recruited to exosomes by NDFIP1.

画像



Western blot - Anti-ITCH/AIP4 antibody [EPR4936] (ab108515)

All lanes : Anti-ITCH/AIP4 antibody [EPR4936] (ab108515) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : ITCH knockout HeLa cell lysate

Lane 3 : HAP1 cell lysate

Lane 4 : K-562 cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

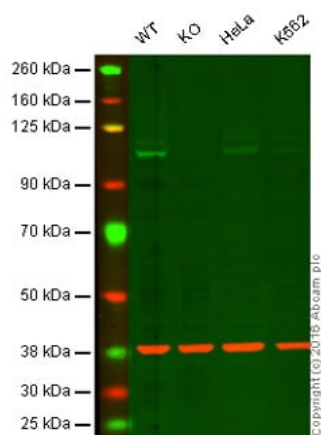
All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) at 1/10000 dilution

Predicted band size: 103 kDa

Observed band size: 103 kDa

Lanes 1-4: Merged signal (red and green). Green - ab108515 observed at 103 kDa. Red - loading control [ab8245](#) observed at 36 kDa.

ab108515 Anti-ITCH/AIP4 antibody [EPR4936] was shown to specifically react with ITCH/AIP4 in wild-type HeLa cells. Loss of signal was observed when knockout cell line [ab265338](#) (knockout cell lysate [ab258014](#)) was used. Wild-type and ITCH/AIP4 knockout samples were subjected to SDS-PAGE. ab108515 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 IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-ITCH/AIP4 antibody [EPR4936]
(ab108515)

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

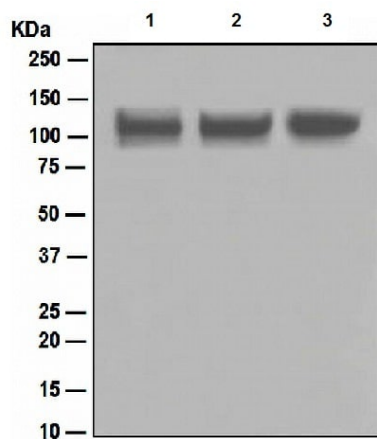
Lane 2: ITCH/AIP4 knockout HAP1 cell lysate (20 µg)

Lane 3: HeLa cell lysate (20 µg)

Lane 4: K562 cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab108515 observed at 110 kDa. Red - loading control, [ab8245](#), observed at 37 kDa.

ab108515 was shown to specifically react with ITCH/AIP4 when ITCH/AIP4 knockout samples were used. Wild-type and ITCH/AIP4 knockout samples were subjected to SDS-PAGE. ab108515 and [ab8245](#) (loading control to GAPDH) were diluted 1/500 and 1/10000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed [ab216773](#) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed [ab216776](#) secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-ITCH/AIP4 antibody [EPR4936]
(ab108515)

All lanes : Anti-ITCH/AIP4 antibody [EPR4936] (ab108515) at 1/1000 dilution

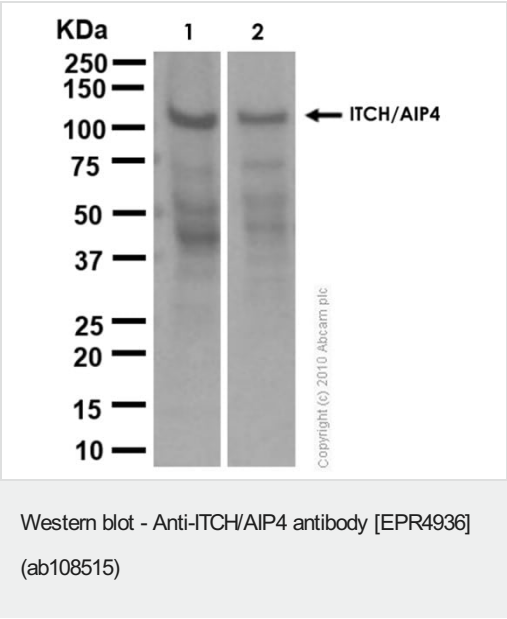
Lane 1 : K562 cell lysate

Lane 2 : HeLa cell lysate

Lane 3 : 293T cell lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 103 kDa



All lanes : Anti-ITCH/AIP4 antibody [EPR4936] (ab108515) at 1/1000 dilution

Lane 1 : Mouse brain lysate

Lane 2 : Rat brain lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 103 kDa

Observed band size: 103 kDa

Exposure time: 1 minute

Blocking buffer and concentration: 5% NFDM/TBST

Why choose a recombinant antibody?

Research with confidence
Consistent and reproducible results

Long-term and scalable supply
Recombinant technology

Success from the first experiment
Confirmed specificity

Ethical standards compliant
Animal-free production

Anti-ITCH/AIP4 antibody [EPR4936] (ab108515)

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