abcam

Product datasheet

Anti-TIA1 antibody [EPR9304] ab140595



ייבער RabMAb

★★★★★ 1 Abreviews 11 References 画像数 10

製品の概要

製品名 Anti-TIA1 antibody [EPR9304]

製品の詳細 Rabbit monoclonal [EPR9304] to TIA1

由来種 Rabbit

アプリケーション 適用あり: WB, IHC-P, IP, ICC/IF

種交差性 交差種: Mouse, 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: HeLa, HuT-78, Jurkat, Molt4, NIH/3T3 and K562 cell lysates. IHC-P: Human spleen tissue.

ICC/IF: HuT-78 cells. ICC/IF KO: Hap1 cells (Hap1-TIA1 KO used as negative cell line). IP: HuT-

78 cells.

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**.

Rat: We have preliminary internal testing data to indicate this antibody may not react with this

species. Please contact us for more information.

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.

Avoid freeze / thaw cycle.

Preservative: 0.01% Sodium azide バッファー

Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS

精製度 Protein A purified

ポリモノ モノクローナル

クローン名 EPR9304

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ab140595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. Predicted molecular weight: 43 kDa.
IHC-P		1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See IHC antigen retrieval protocols. For unpurified use at 1/100 - 1/250.
IP		1/10 - 1/100.
ICC/IF	★★☆☆☆ (1)	1/100 - 1/250.

ターゲット情報

機能 Involved in alternative pre-RNA splicing and regulation of mRNA translation by binding to AU-rich

elements (AREs) located in mRNA 3' untranslated regions (3' UTRs). Possesses nucleolytic

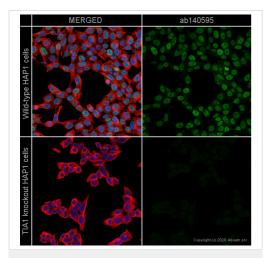
activity against cytotoxic lymphocyte target cells. May be involved in apoptosis.

配列類似性 Contains 3 RRM (RNA recognition motif) domains.

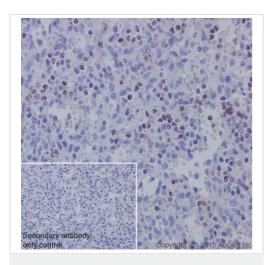
細胞内局在 Cytoplasmic granule. Nucleus. Accumulates in cytoplasmic stress granules (SG) following cellular

damage.

画像



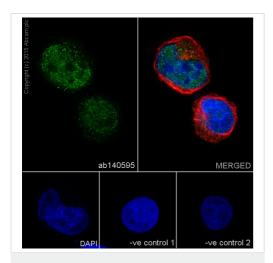
Immunocytochemistry/ Immunofluorescence - Anti-TIA1 antibody [EPR9304] (ab140595)



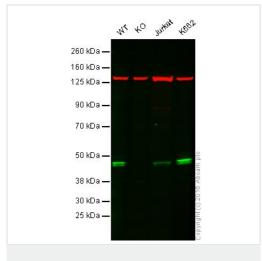
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TIA1 antibody [EPR9304] (ab140595)

ab140595 staining TIA1 in wild-type Hap1 cells (top panel) and TIA1 knockout Hap1 cells (bottom panel). The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.1% 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 with ab140595 at 1/250 dilution and ab7291 (Mouse monoclonal to alpha Tubulin) at 1/1000 dilution overnight at +4°C, followed by a further incubation at room temperature for 1h with a goat secondary antibody to rabbit lgG (Alexa Fluor® 488) (ab150081) at 2 μg/ml (shown in green) and a goat secondary antibody to mouse lgG (Alexa Fluor® 594) (ab150120) at 2 μg/ml (shown in red). Nuclear DNA was labelled in blue with DAPI. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human spleen tissue labelling TIA1 with purified ab140595 at 1/1000. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. ab97051, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



Immunocytochemistry/ Immunofluorescence - Anti-TIA1 antibody [EPR9304] (ab140595)



Western blot - Anti-TIA1 antibody [EPR9304] (ab140595)

Immunocytochemistry/Immunofluorescence analysis of HuT-78 cells labelling TIA1 with purified ab140595 at 1/100. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. ab150077, an Alexa Fluor[®] 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. ab7291, a mouse anti-tubulin (1/1000) and ab150120, an Alexa Fluor[®] 594-conjugated goat anti-mouse IgG (1/1000) were also used.

Control 1: primary antibody (1/100) and secondary antibody, **ab150120**, an Alexa Fluor[®] 594-conjugated goat anti-mouse lgG (1/1000).

Control 2: $\underline{ab7291}$ (1/1000) and secondary antibody, $\underline{ab150077}$, an Alexa Fluor® 488-conjugated goat anti-rabbit lgG (1/1000).

Lane 1: Wild-type HAP1 cell lysate (40 µg)

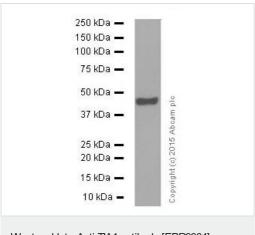
Lane 2: TIA1 knockout HAP1 cell lysate (40 µg)

Lane 3: Jurkat cell lysate (40 µg)

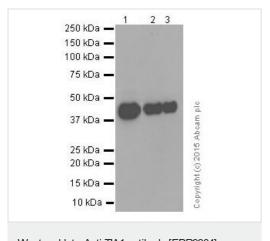
Lane 4: K562 cell lysate (40 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab140595 observed at 43 kDa. Red - loading control, **ab18058**, observed at 124 kDa.

ab140595 was shown to specifically react with TIA1 when TIA1 knockout samples were used. Wild-type and TIA1 knockout samples were subjected to SDS-PAGE. Ab140595 and **ab18058** (loading control to Vinculin) were diluted at 1/1000 and 1/10000 dilution respectively and incubated overnight at 4C. 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-TIA1 antibody [EPR9304] (ab140595)



Western blot - Anti-TIA1 antibody [EPR9304] (ab140595)

Anti-TIA1 antibody [EPR9304] (ab140595) at 1/5000 dilution (purified) + NIH/3T3 whole cell lysate at 20 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/10000 dilution

Predicted band size: 43 kDa **Observed band size:** 42-43 kDa

Blocking and dilution buffer: 5% NFDM/TBST.

All lanes : Anti-TIA1 antibody [EPR9304] (ab140595) at 1/5000 dilution (purified)

Lane 1 : Jurkat whole cell lysate
Lane 2 : K562 whole cell lysate
Lane 3 : HUT-78 whole cell lysate

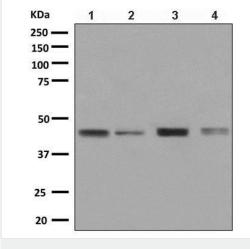
Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/10000 dilution

Predicted band size: 43 kDa **Observed band size:** 42-43 kDa

Blocking and dilution buffer: 5% NFDM/TBST.



Western blot - Anti-TIA1 antibody [EPR9304] (ab140595)



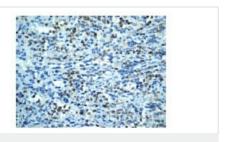
Lane 1 : HuT-78 cell lysate
Lane 2 : Jurkat cell lysate
Lane 3 : Molt-4 cell lysate
Lane 4 : K562 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

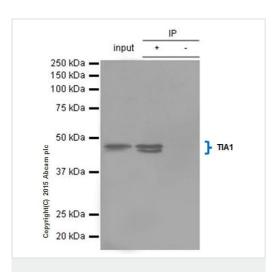
All lanes: HRP-conjugated goat anti-rabbit lgG at 1/2000 dilution

Predicted band size: 43 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TIA1 antibody [EPR9304] (ab140595)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human spleen tissue labelling TIA1 with unpurified ab140595 at a dilution of 1/100.



Immunoprecipitation - Anti-TIA1 antibody [EPR9304] (ab140595)

ab140595 (purified) at 1/40 immunoprecipitating TIA1 in HuT-78 whole cell lysate.

Lane 1 (input): HuT-78 whole cell lysate (10µg)

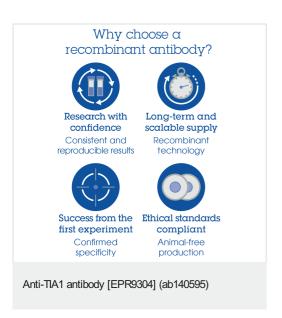
Lane 2 (+): ab140595 + HuT-78 whole cell lysate.

Lane 3 (-): Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab140595 in HuT-78 whole cell lysate.

For western blotting, a HRP-conjugated anti-rabbit lgG, specific to the non-reduced form of lgG was used as the secondary antibody (1/1500).

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



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