abcam

Product datasheet

Anti-TIA1 antibody [EPR9304] - BSA and Azide free ab230829

KO VALIDATED | Recombinant | RabMAb

5 Images

Overview

Product name	Anti-TIA1 antibody [EPR9304] - BSA and Azide free
Description	Rabbit monoclonal [EPR9304] to TIA1 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** IP, ICC/IF, IHC-P, WB
Species reactivity	**Reacts with:** Mouse, Human
Immunogen	Synthetic peptide (the amino acid sequence is considered to be commercially sensitive) within Human TIA1 aa 350 to the C-terminus (C terminal). The exact sequence is proprietary.
Positive control	WB: HuT-78, Jurkat, Molt4, NIH/3T3 and K562 cell lysates. IHC-P: Human spleen tissue. ICC/IF: HuT-78 cells. IP: HuT-78 cells.
General notes	ab230829 is the carrier-free version of ab140595 This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes. Our carrier-free formats are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency. Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. Ab230829 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm. *Maxpar® is a trademark of Fluidigm Canada Inc.* Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.

Storage buffer	Constituent: PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR9304
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab230829** in the following tested applications.

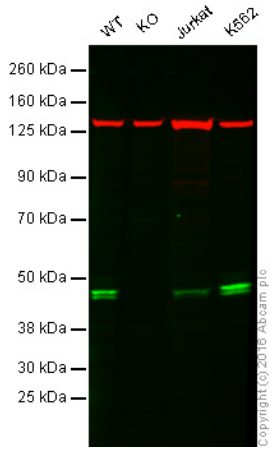
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See IHC antigen retrieval protocols.
WB		Use at an assay dependent concentration. Predicted molecular weight: 43 kDa.

Target

Function	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.
Sequence similarities	Contains 3 RRM (RNA recognition motif) domains.
Cellular localization	Cytoplasmic granule. Nucleus. Accumulates in cytoplasmic stress granules (SG) following cellular damage.

Images



Western blot - Anti-TIA1 antibody [EPR9304] - BSA and Azide free (ab230829)

This WB data was generated using the same anti-TIA1 antibody clone, EPR9304, in a different buffer formulation (cat# ab140595).

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

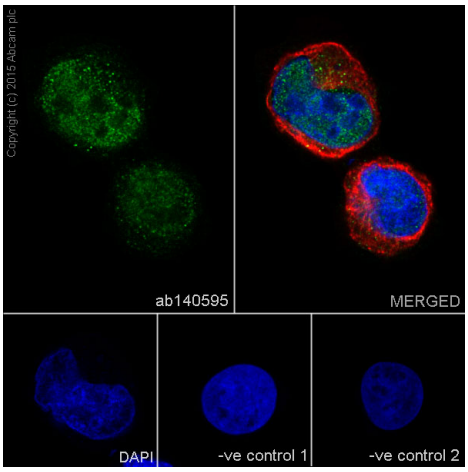
Lane 2: TIA1 knockout HAP1 cell lysate (40 µg)

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.



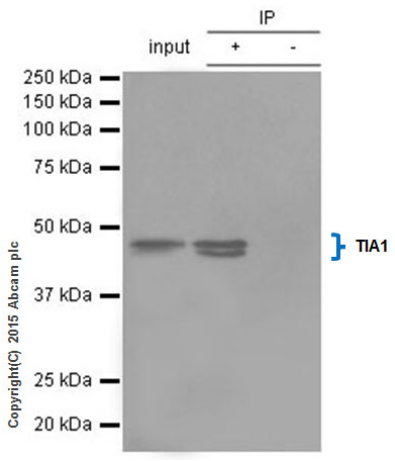
Immunocytochemistry/ Immunofluorescence - Anti-TIA1 antibody [EPR9304] - BSA and Azide free (ab230829)

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 IgG (1/1000).

Control 2: ab7291 (1/1000) and secondary antibody, ab150077, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab140595).



Immunoprecipitation - Anti-TIA1 antibody [EPR9304] - BSA and Azide free (ab230829)

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.

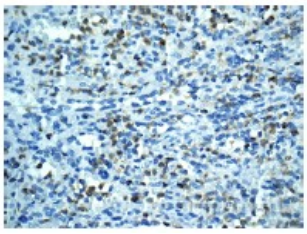
Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab140595 in HuT-78 whole cell lysate.

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

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.

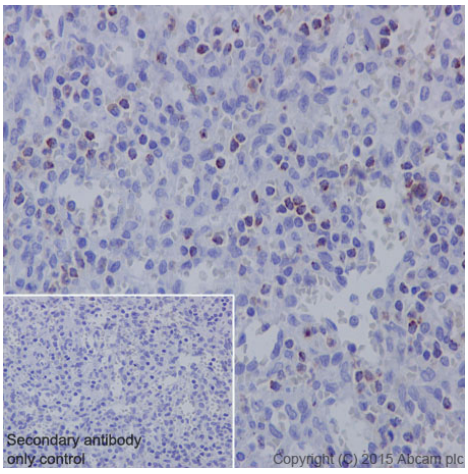
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab140595).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TIA1 antibody [EPR9304] - BSA and Azide free (ab230829)

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab140595).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TIA1 antibody [EPR9304] - BSA and Azide free (ab230829)

This IHC data was generated using the same anti-TIA1 antibody clone, EPR9304, in a different buffer formulation (cat# ab140595).

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.

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