Anti-TIA1 Antibody [JM42-11] - BSA and Azide free

HA750385

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse
Applications:	WB, IF-Tissue, IHC-P, IP
Molecular Wt:	Predicted band size: 43 kDa
Clone number:	JM42-11

Description: FAS, also referred to as CD95 or APO-1, is a type I transmembrane protein that plays a central role mediating viral immunity. TIA-1 and TIAR are two closely related proteins that possess three RRMs (RNA recognition motifs), designated RRM 1, 2 and 3. Although both TIA-1 and TIAR are thought to function as mediators of apoptotic cell death, their specific roles in such pathways are unknown. Unlike TIA-1, which is found in the granules of cytotoxic lymphocytes, TIAR expression is limited to the nucleus and found in a much broader range of cells including, but not limited to, cells of hematopoietic origin. TIAR is translocated to the cytoplasm shortly after FAS ligation and this event immediately proceeds the onset of DNA fragmentation. A novel serine/threonine kinase that is activated as a result of FAS ligation, designated FAST (FAS-activated serine/threonine), shows kinase specificity towards both TIA-1 and TIAR. In unstimulated Jurkat cells, FAST resides in the cytoplasm as a highly phosphorylated protein and is quickly dephosphorylated and activated in response to stimulated FAS.

Immunogen: Synthetic peptide within Human TIA1 aa 353-386 / 386.

Positive control: Jurkat cell lysate, K-562 cell lysate, MOLT-4 cell lysate, HepG2 cell lysate, A20 cell lysate, NIH/3T3 cell lysate, Human lung tissue lysate, human tonsil tissue, human spleen tissue.

Subcellular location: Nucleus, Cytoplasm, Stress granule.

Database links: SwissProt: P31483 Human | P52912 Mouse

Recommended Dilutions:

WB	1:500-1:2,000
IF-Tissue	1:50
IHC-P	1:200-1:1,000
IP	1-2μg/sample

Storage Buffer: 1*PBS (pH7.4).

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

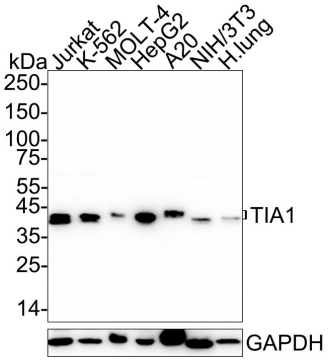

Fig1: Western blot analysis of TIA1 on different lysates with Rabbit anti-TIA1 antibody (HA750385) at 1/2,000 dilution.

Lane 1: Jurkat cell lysate (15 µg/Lane)
Lane 2: K-562 cell lysate (15 µg/Lane)
Lane 3: MOLT-4 cell lysate (15 µg/Lane)
Lane 4: HepG2 cell lysate (15 µg/Lane)
Lane 5: A20 cell lysate (15 µg/Lane)
Lane 6: NIH/3T3 cell lysate (15 µg/Lane)
Lane 7: Human lung tissue lysate (30 µg/Lane)

Predicted band size: 43 kDa
Observed band size: 41/43 kDa

Exposure time: 2 minutes 6 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA750385) at 1/2,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

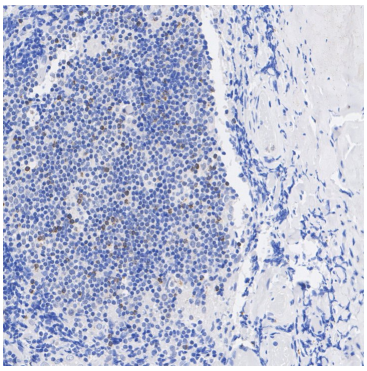

Fig2: Immunohistochemical analysis of paraffin-embedded human tonsil tissue with Rabbit anti-TIA1 antibody (HA750385) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA750385) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

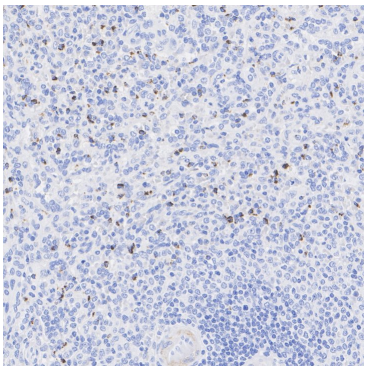

Fig3: Immunohistochemical analysis of paraffin-embedded human spleen tissue with Rabbit anti-TIA1 antibody (HA750385) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA750385) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

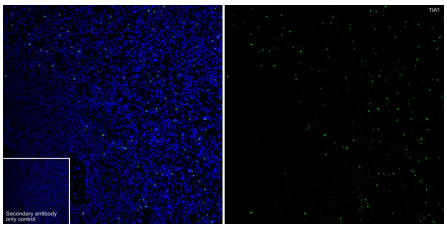

Fig4: Immunofluorescence analysis of paraffin-embedded human spleen tissue labeling TIA1 with Rabbit anti-TIA1 antibody (HA750385) at 1/50 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS, and then probed with the primary antibody (HA750385, green) at 1/50 dilution overnight at 4 ℃, washed with PBS. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. Nuclei were counterstained with DAPI (blue).

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Bann DV et al. A murine retrovirus co-Opts YB-1, a translational regulator and stress granule-associated protein, to facilitate virus assembly. J Virol 88:4434-50 (2014).
2. Vance C et al. ALS mutant FUS disrupts nuclear localization and sequesters wild-type FUS within cytoplasmic stress granules. Hum Mol Genet 22:2676-88 (2013).