

TIA1 Recombinant antibody, PBS Only

Catalog Number: **82672-1-PBS**

Basic Information

Catalog Number: 82672-1-PBS	GenBank Accession Number: BC015944	Purification Method: Protein A purification
Size: 1mg/ml	GeneID (NCBI): 7072	CloneNo.: 3N22
Source: Rabbit	UNIPROT ID: P31483	
Isotype: IgG	Full Name: TIA1 cytotoxic granule-associated RNA binding protein	
Immunogen Catalog Number: AG2778	Calculated MW: 214 aa, 24 kDa, 43 kDa	
	Observed MW: 38-40 kDa	

Applications

Tested Applications:
WB, IF, Indirect ELISA

Species Specificity:
Human, mouse, rat

Background Information

TIA1, also named as p40-TIA-1, is 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). It possesses nucleolytic activity against cytotoxic lymphocyte target cells. TIA1 may be involved in apoptosis. Two isoforms of this protein exist - 41kDa and 42kDa. one of these was a missense variant (P362L) in TIA1. Similar to the ALS-related disease proteins TDP-43, hnRNPA1, and FUS, TIA1 is an RNA-binding protein containing a prionlike LCD and assembles into membrane-less organelles, including SGs. Postmortem neuropathology of five TIA1 mutations carriers showed a consistent pathological signature with numerous round, hyaline, TAR DNA-binding protein 43 (TDP-43)-positive inclusions. TIA1 mutations significantly increased the propensity of TIA1 protein to undergo phase transition. In live cells, TIA1 mutations delayed stress granule (SG) disassembly and promoted the accumulation of non-dynamic SGs that harbored TDP-43.

Storage

Storage:
Store at -80°C.
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:
PBS Only

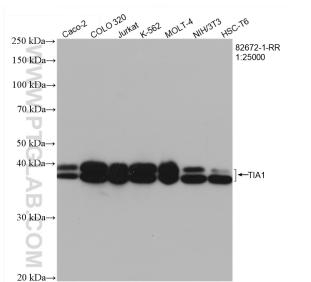
For technical support and original validation data for this product please contact:

T: 4006900926

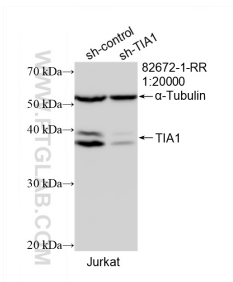
E: Proteintech-CN@ptglab.comW: ptgcn.com

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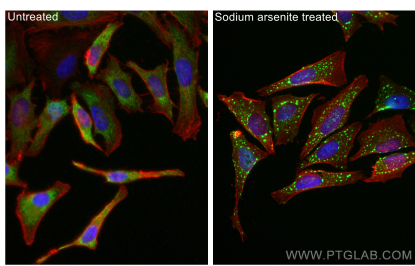
Selected Validation Data



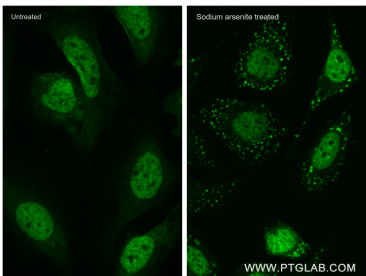
Various lysates were subjected to SDS PAGE followed by western blot with 82672-1-RR (TIA1 antibody) at dilution of 1:25000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 82672-1-PBS in a different storage buffer formulation.



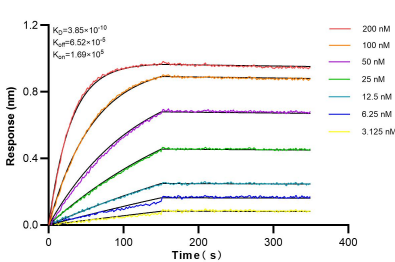
WB result of TIA1 antibody (82672-1-RR; 1:20000; incubated at room temperature for 1.5 hours) with sh-Control and sh-TIA1 transfected Jurkat cells. This data was developed using the same antibody clone with 82672-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed sodium arsenite treated HeLa cells using TIA1 antibody (82672-1-RR, Clone: 3N22) at dilution of 1:1000 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red). This data was developed using the same antibody clone with 82672-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed sodium arsenite treated HeLa cells using TIA1 antibody (82672-1-RR, Clone: 3N22) at dilution of 1:1000 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). This data was developed using the same antibody clone with 82672-1-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 82672-1-RR against Human TIA1 were performed. The affinity constant is 0.385 nM.