

For Research Use Only

# TIA1 Monoclonal antibody, PBS Only (Detector)

Catalog Number: 68486-1-PBS



## Basic Information

<b>Catalog Number:</b> 68486-1-PBS	<b>GenBank Accession Number:</b> BC015944	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 1mg/ml	<b>GeneID (NCBI):</b> 7072	<b>CloneNo.:</b> 2C11F4
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P31483	
<b>Isotype:</b> IgG1	<b>Full Name:</b> TIA1 cytotoxic granule-associated RNA binding protein	
<b>Immunogen Catalog Number:</b> AG2778	<b>Calculated MW:</b> 214 aa, 24 kDa, 43 kDa	
	<b>Observed MW:</b> 38-40 kDa	

## Applications

**Tested Applications:**  
WB, IHC, Cytometric bead array, 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

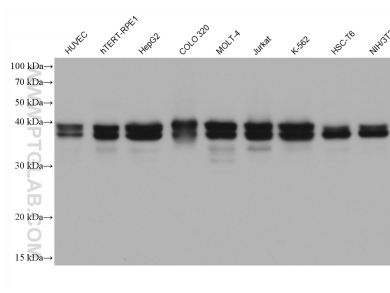
**Storage:**  
Store at -80°C.  
**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

**Storage Buffer:**  
PBS Only

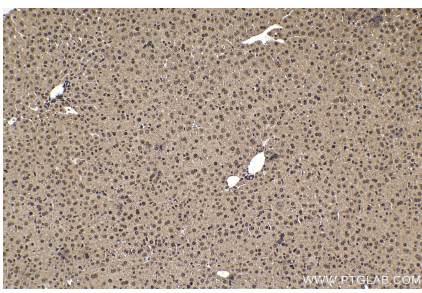
For technical support and original validation data for this product please contact:  
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

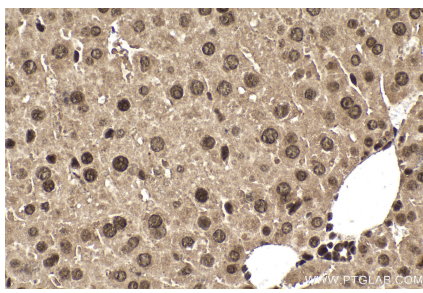
Selected Validation Data



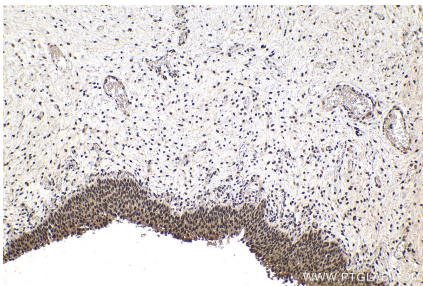
Various lysates were subjected to SDS PAGE followed by western blot with 68486-1-Ig (TIA1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 68486-1-PBS in a different storage buffer formulation.



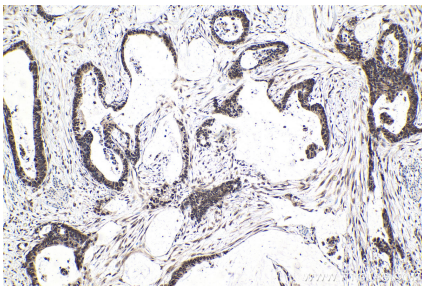
Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 68486-1-Ig (TIA1 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 68486-1-PBS in a different storage buffer formulation.



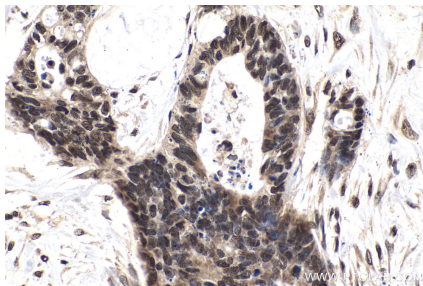
Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 68486-1-Ig (TIA1 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 68486-1-PBS in a different storage buffer formulation.



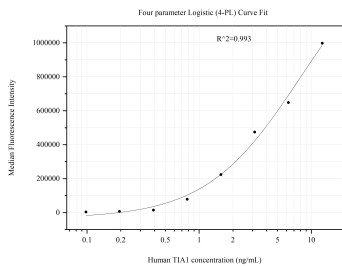
Immunohistochemical analysis of paraffin-embedded human urothelial carcinoma tissue slide using 68486-1-Ig (TIA1 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 68486-1-PBS in a different storage buffer formulation.



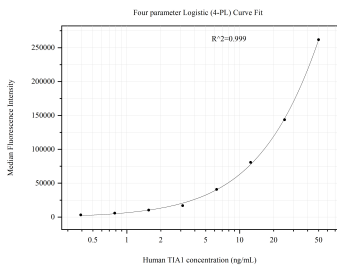
Immunohistochemical analysis of paraffin-embedded human urothelial carcinoma tissue slide using 68486-1-Ig (TIA1 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 68486-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human urothelial carcinoma tissue slide using 68486-1-Ig (TIA1 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 68486-1-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP51061-1, TIA1 Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 68486-2-PBS. Detection antibody: 68486-1-PBS. Standard:Ag2778. Range: 0.098-12.5 ng/mL.



Cytometric bead array standard curve of MP51061-2, TIA1 Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 68486-3-PBS. Detection antibody: 68486-1-PBS. Standard:Ag2778. Range: 0.391-50 ng/mL.