For Research Use Only

CoraLite®594-conjugated TIA1 Polyclonal antibody

Catalog Number:CL594-12133 Featured Product



Purification Method:

IF/ICC 1:50-1:500

588 nm / 604 nm

wavelengths:

Antigen affinity purification

Excitation/Emission maxima

Recommended Dilutions:

Basic Information

Catalog Number: GenBank Accession Number:

CL594-12133 BC015944 GeneID (NCBI):

Nanodrop: **UNIPROT ID:** P31483 Rabbit

100ul, Concentration: 1000 ug/ml by 7072

Isotype: TIA1 cytotoxic granule-associated

RNA binding protein IgG Immunogen Catalog Number: Calculated MW: 214 aa, 24 kDa, 43 kDa AG2778

> Observed MW: 40 kDa

Full Name:

Applications

Tested Applications:

Species Specificity: human, mouse, rat

Positive Controls:

IF/ICC: LO2 cells,

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 TIA1mutations carriers showed a consistent pathological signature with numerous round, hyaline, TAR DNA-binding protein 43 (TDP-43)-positive inclusions.TIA1mutations significantly increased the propensity of TIA1 protein to undergo phase transition. In live cells,TIA1mutations delayed stress granule (SG) disassembly and promoted the accumulation of non-dynamic SGs that harbored TDP-43. Moreover, TDP-43 in SGs became less mobile and insoluble.

Storage

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

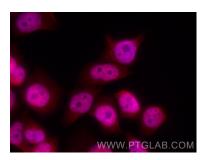
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

E: proteintech@ptglab.com

W: ptglab.com

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed L02 cells using CoraLite® 594 TIA1 antibody (CL594-12133) at dilution of 1:200.