

TIAL1 & TIA Antibody (internal region)
Peptide-affinity purified goat antibody
Catalog # AF3084a**Specification**

TIAL1 & TIA Antibody (internal region) - Product Information

Application	WB, IHC
Primary Accession	Q01085
Other Accession	NP_003243.1 , NP_001029097.1 , 7073 , 7072 , 21843 (mouse)
Reactivity	Human
Predicted	Mouse, Dog, Cow
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	41591

TIAL1 & TIA Antibody (internal region) - Additional Information**Gene ID** 7073**Other Names**

Nucleolysin TIAR, TIA-1-related protein, TIAL1

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

TIAL1 & TIA Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

TIAL1 & TIA Antibody (internal region) - Protein Information**Name** TIAL1**Function**

RNA-binding protein involved in alternative pre-RNA splicing and in cytoplasmic stress granules formation (PubMed: [1326761](http://www.uniprot.org/citations/1326761), PubMed: [8576255](http://www.uniprot.org/citations/8576255), PubMed: [17488725](http://www.uniprot.org/citations/17488725), PubMed: [10613902](http://www.uniprot.org/citations/10613902)). Shows a preference for uridine-rich RNAs (PubMed: [10613902](http://www.uniprot.org/citations/10613902)).

[8576255](http://www.uniprot.org/citations/8576255)). Activates splicing of alternative exons with weak 5' splice sites followed by a U-rich stretch on its own pre-mRNA and on TIA1 mRNA (By similarity). Promotes the inclusion of TIA1 exon 5 to give rise to the long isoform (isoform a) of TIA1 (PubMed:[17488725](http://www.uniprot.org/citations/17488725)). Acts downstream of the stress-induced phosphorylation of EIF2S1/EIF2A to promote the recruitment of untranslated mRNAs to cytoplasmic stress granules (SG) (PubMed:[10613902](http://www.uniprot.org/citations/10613902)). Possesses nucleolytic activity against cytotoxic lymphocyte target cells (PubMed:[1326761](http://www.uniprot.org/citations/1326761)). May be involved in apoptosis (PubMed:[1326761](http://www.uniprot.org/citations/1326761)).

Cellular Location

Nucleus. Cytoplasm {ECO:0000250|UniProtKB:P70318}. Cytolytic granule. Cytoplasm, Stress granule Note=Nuclear import seems to be coupled to RNA polymerase II transcription and may be dependent on RNA-binding (By similarity) Accumulates in cytoplasmic stress granules (SG) following cellular damage (PubMed:10613902). {ECO:0000250|UniProtKB:P70318, ECO:0000269|PubMed:10613902}

Tissue Location

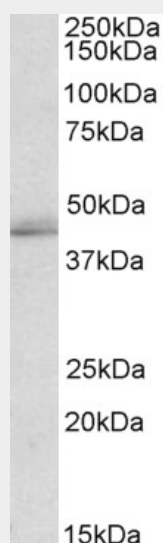
Expressed in brain, heart, kidney, lung and skeletal muscle.

TIAL1 & TIA Antibody (internal region) - Protocols

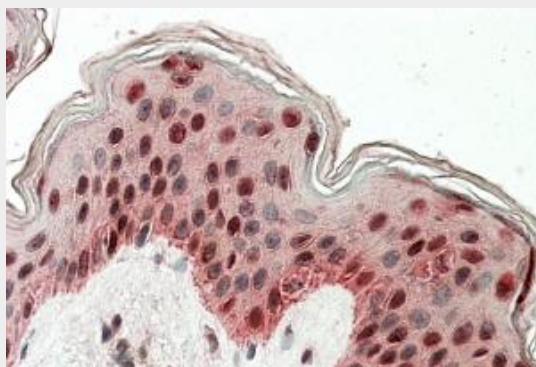
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

TIAL1 & TIA Antibody (internal region) - Images



AF3084a (2 µg/ml) staining of K562 lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF3084a (3.8 µg/ml) staining of paraffin embedded Human Skin. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

TIAL1 & TIA Antibody (internal region) - Background

This antibody is expected to recognize both isoforms (NP_003243.1; NP_001029097.1).

TIAL1 & TIA Antibody (internal region) - References

TIA nuclear proteins regulate the alternate splicing of lysyl hydroxylase 2. Yeowell HN, Walker LC, Mauger DM, Seth P, Garcia-Blanco MA, The Journal of investigative dermatology 2009 Jun 129 (6): 1402-11. PMID: 19110540