

TIA-1

Mouse Monoclonal antibody(Mab) Catalog # AD80171

Product Information

Application	IHC-P
Primary Accession	<u>P31483</u>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	265E3G4
Calculated MW	42963

Additional Information

Gene ID Gene Name Other Names	7072 TIA1 Cytotoxic granule associated RNA binding protein TIA1 {ECO:0000312 HGNC:HGNC:11802}, Nucleolysin TIA-1 isoform p40, RNA-binding protein TIA-1, T-cell-restricted intracellular antigen-1, TIA-1, p40-TIA-1, TIA1
Dilution	IHC-P~~Ready-to-use
Storage	Maintain refrigerated at 2-8°C.
Precautions	TIA-1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TIA1
Function	RNA-binding protein involved in the regulation of alternative pre-RNA splicing and mRNA translation by binding to uridine-rich (U- rich) RNA sequences (PubMed: <u>11106748</u> , PubMed: <u>12486009</u> , PubMed: <u>17488725</u> , PubMed: <u>8576255</u>). Binds to U-rich sequences immediately downstream from a 5' splice sites in a uridine-rich small nuclear ribonucleoprotein (U snRNP)-dependent fashion, thereby modulating alternative pre-RNA splicing (PubMed: <u>11106748</u> , PubMed: <u>8576255</u>). Preferably binds to the U- rich IAS1 sequence in a U1 snRNP-dependent manner; this binding is optimal if a 5' splice sites; the activation depends on the intron sequence downstream from the 5' splice site, with a preference for a downstream U-rich sequence (PubMed: <u>11106748</u>). By interacting with SNRPC/U1-C, promotes recruitment and binding of spliceosomal U1 snRNP to 5' splice sites followed by U-rich
	sequences, thereby lacintating atypicars splice site recognition by or sinth

	(PubMed: <u>11106748</u> , PubMed: <u>12486009</u> , PubMed: <u>17488725</u>). Activates splicing
	of alternative exons with weak 5' splice sites followed by a U-rich stretch on
	its own pre-mRNA and on TIAR mRNA (By similarity). Acts as a modulator of
	alternative splicing for the apoptotic FAS receptor, thereby promoting
	apoptosis (PubMed: <u>11106748</u> , PubMed: <u>17488725</u> , PubMed: <u>1934064</u>). Binds
	to the 5' splice site region of FAS intron 5 to promote accumulation of
	transcripts that include exon 6 at the expense of transcripts in which exon 6 is
	skipped, thereby leading to the transcription of a membrane-bound apoptotic
	FAS receptor, which promotes apoptosis (PubMed: <u>11106748</u> ,
	PubMed: <u>17488725</u> , PubMed: <u>1934064</u>). Binds to a conserved AU-rich cis
	element in COL2A1 intron 2 and modulates alternative splicing of COL2A1
	exon 2 (PubMed: <u>17580305</u>). Also binds to the equivalent AT-rich element in
	COL2A1 genomic DNA, and may thereby be involved in the regulation of
	transcription (PubMed: <u>17580305</u>). Binds specifically to a polypyrimidine-rich
	controlling element (PCE) located between the weak 5' splice site and the
	intronic splicing silencer of CFTR mRNA to promote exon 9 inclusion, thereby
	antagonizing PTB1 and its role in exon skipping of CFTR exon 9
	(PubMed: <u>14966131</u>). Involved in the repression of mRNA translation by
	binding to AU-rich elements (AREs) located in mRNA 3' untranslated regions
	(3' UTRs), including target ARE-bearing mRNAs encoding TNF and PTGS2 (By
	similarity). Also participates in the cellular response to environmental stress,
	by acting downstream of the stress-induced phosphorylation of EIF2S1/EIF2A
	to promote the recruitment of untranslated mRNAs to cytoplasmic stress
	granules (SGs), leading to stress-induced translational arrest
	(PubMed: <u>10613902</u>). Formation and recruitment to SGs is regulated by Zn(2+)
	(By similarity). Possesses nucleolytic activity against cytotoxic lymphocyte
	target cells (PubMed: <u>1934064</u>).
Cellular Location	Nucleus. Cytoplasm Cytoplasm, Stress granule Note=Accumulates in
	cytoplasmic stress granules (SG) following cellular damage
	(PubMed:10613902, PubMed:15371533). Recruitment to SG is induced by
	Zn(2+) (By similarity). {ECO:0000250 UniProtKB:P52912,
	ECO:0000269 PubMed:10613902, ECO:0000269 PubMed:15371533}
lissue Location	Expressed in neart, small intestine, kidney, liver, lung, skeletal muscle, testes,
	pancreas, and ovary (at protein level)

Images



扁桃体

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.