

TRBP1 Antibody

Catalog # ASC10487

Product Information

Application	WB, E
Primary Accession	Q13395
Other Accession	NP_005637 , 110825988
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	181675
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	TRBP1 antibody can be used for detection of TRBP1 by Western blot at 1 - 2 μ g/mL.

Additional Information

Gene ID	6894
Other Names	TRBP1 Antibody: TRM3, TRP185, TRP-185, TRM3, Probable methyltransferase TARBP1, TAR RNA-binding protein 1, TAR (HIV-1) RNA binding protein 1
Target/Specificity	TARBP1;
Reconstitution & Storage	TRBP1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	TRBP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TARBP1
Synonyms	TRM3, TRP185
Function	S-adenosyl-L-methionine-dependent 2'-O-ribose methyltransferase that catalyzes the formation of 2'-O-methylguanosine at position 18 (Gm18) in a subset of tRNA (PubMed: 18412263 , PubMed: 31019095 , PubMed: 38867004). Selectively mediates Gm18 methylation of tRNA ^{Gln} -TTG/CTG and tRNA ^{Ser} -TGA/GCT. Gm18 modification can enhance the stability of modified tRNAs (PubMed: 38867004).

Background

TRBP1 Antibody: The human trans-activation response (TAR) RNA binding protein 1 (TRBP1) was initially identified as a protein that binds to the HIV-1 TAR RNA and activates the long terminal repeat (LTR) expression in the absence and presence of the viral trans-activator Tat. This binding is enhanced by the presence of co-factors such as elongation factor 1 α (EF-1 α), polypyrimidine tract-binding protein (PTB), and the chaperonin-like protein stimulator of TAR RNA-binding proteins (SRB). TRBP1 may act to disengage RNA polymerase II from TAR during transcriptional elongation if the RNA polymerase stalls at the TAR during transcriptional elongation.

References

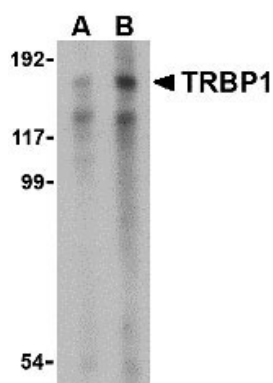
Gatignol A, Buckler-White A, Berkhout B, et al. Characterization of a human TAR RNA-binding protein that activates the HIV-1 LTR. *Science* 1991; 251:1597-1600.

Wu-Baer F, Lane WS, and Gaynor RB. Identification of a group of cellular cofactors that stimulate the binding of RNA polymerase II and TRP-185 to human immunodeficiency virus 1 TAR RNA. *J. Biol. Chem.* 1996; 271:4201-8.

Wu-Baer F, Lane WS, and Gaynor RB. The cellular factor TRP-185 regulates RNA polymerase II binding to HIV-1 TAR RNA. *EMBO J.* 1995; 14:5995-6009.

(07-01D)

Images



Western blot analysis of TRBP1 in 3T3 cell lysate with TRBP1 antibody at (A) 1 and (B) 2 μ g/mL.

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