10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

EIF1AY Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13157a

Product Information

Application	WB, IHC-P, E
Primary Accession	O14602
Other Accession	Q6VV72, P47814, Q60872, Q8BMJ3, P47813, NP_004672.2
Reactivity	Human
Predicted	Mouse, Rabbit, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32650
Calculated MW	16442
Antigen Region	1-30

Additional Information

Gene ID	9086
Other Names	Eukaryotic translation initiation factor 1A, Y-chromosomal, eIF-1A Y isoform, Eukaryotic translation initiation factor 4C, eIF-4C, EIF1AY
Target/Specificity	This EIF1AY antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human EIF1AY.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	EIF1AY Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	EIF1AY
Function	Component of the 43S pre-initiation complex (43S PIC), which binds to the mRNA cap-proximal region, scans mRNA 5'-untranslated region, and locates

the initiation codon. This protein enhances formation of the cap-proximal complex. Together with EIF1, facilitates scanning, start codon recognition, promotion of the assembly of 48S complex at the initiation codon (43S PIC becomes 48S PIC after the start codon is reached), and dissociation of aberrant complexes. After start codon location, together with EIF5B orients the initiator methionine-tRNA in a conformation that allows 60S ribosomal subunit joining to form the 80S initiation complex. Is released after 80S initiation complex formation, just after GTP hydrolysis by EIF5B, and before release of EIF5B. Its globular part is located in the A site of the 40S ribosomal subunit. Its interaction with EIF5 during scanning contribute to the maintenance of EIF1 within the open 43S PIC. In contrast to yeast orthologs, does not bind EIF1.

Cellular Location Cytoplasm.

Tissue Location Ubiquitous.

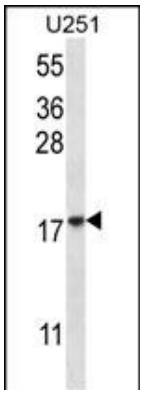
Background

This gene encodes a protein similar to eukaryotic translation initiation factor 1A (EIF1A). EIF1A is required for the binding of the 43S complex (a 40S subunit, eIF2/GTP/Met-tRNAi and eIF3) to the 5' end of capped RNA.

References

Serajee, F.J., et al. J. Child Neurol. 24(10):1258-1261(2009)
Lim, J., et al. Cell 125(4):801-814(2006)
Fortna, A., et al. PLoS Biol. 2 (7), E207 (2004) :
Agate, R.J., et al. Mol. Biol. Evol. 21(2):384-396(2004)
Skaletsky, H., et al. Nature 423(6942):825-837(2003)

Images



EIF1AY Antibody (N-term) (Cat. #AP13157a) western blot analysis in U251 cell line lysates (35ug/lane).This demonstrates the EIF1AY antibody detected the EIF1AY protein (arrow).

EIF1AY Antibody (N-term) (Cat. #AP13157a)immunohistochemistry analysis in formalin fixed and paraffin embedded human prostate carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of EIF1AY Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

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