

# eIF4A3 Rabbit mAb [3IOR]

Cat NO. :A87500

#### Information:

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB,IHC,ICC/IF	н	P38919	47 kDa	Rabbit	IgG	100ul,200ul

Applications detail:

Application	Dilution			
wв	1:1000-2000			
ІНС	1:100			
ICC/IF	1:100			
The optimal dilutions should be determined by the end user				

Conjugate:

UnConjugate

Form:

Liquid

sensitivity:

**Endogenous** 

**Purification**:

Protein A purification

### Specificity:

Antibody is produced by immunizing animals with a synthetic peptide at the sequence of human eIF4A3

### Storage buffer and conditions:

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at-20°C or -80°C.

 $\label{products} \textbf{Products are valid for one natural year of receipt.} \textbf{Avoid repeated freeze} \ \textit{I} \ \textbf{thaw cycles}.$ 

## Tissue specificity:

Ubiquitously expressed..

# Subcellular location:

Nucleus. Nucleus speckle. Cytoplasm.

#### Function:

ATP-dependent RNA helicase (PubMed:16170325). Involved in pre-mRNA splicing as component of the spliceosome (PubMed:11991638, PubMed:22961380, PubMed:28502770, PubMed:28076346, PubMed:29301961). Core component of the splicing-dependent multiprotein exon junction complex (EJC) deposited at splice junctions on mRNAs (PubMed:16209946, PubMed:16170325, PubMed:16314458, PubMed:16923391, PubMed:16931718, PubMed:19033377, PubMed:20479275). The EJC is a dynamic structure consisting of core proteins and several peripheral nuclear and cytoplasmic associated factors that join the complex only transiently either during EJC assembly or during subsequent mRNA metabolism. The EJC marks the position of the exon-

Introduction: WB: Western Blot IP: Immunoprecipitation IHC: Immunohistochemistry ChIP: Chromatin Immunoprecipitation ICC/IF: Immunocytochemistry/
Immunofluorescence F: Flow Cytometry

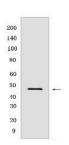
Cross Reactivity: H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus MI: mink C: chicken Dm D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Hr: horse



exon junction in the mature mRNA for the gene expression machinery and the core components remain bound to spliced mRNAs throughout all stages of mRNA metabolism thereby influencing downstream processes including nuclear mRNA export, subcellular mRNA localization, translation efficiency and nonsense-mediated mRNA decay (NMD). Its RNA-dependent ATPase and RNA-helicase activities are induced by CASC3, but abolished in presence of the MAGOH-RBM8A heterodimer, thereby trapping the ATP-bound EJC core onto spliced mRNA in a stable conformation. The inhibition of ATPase activity by the MAGOH-RBM8A heterodimer increases the RNA-binding affinity of the EJC. Involved in translational enhancement of spliced mRNAs after formation of the 80S ribosome complex. Binds spliced mRNA in sequence-independent manner, 20-24 nucleotides upstream of mRNA exonexon junctions. Shows higher affinity for single-stranded RNA in an ATP-bound core EJC complex than after the ATP is hydrolyzed. Involved in the splicing modulation of BCL2L1/Bcl-X (and probably other apoptotic genes), specifically inhibits formation of proapoptotic isoforms such as Bcl-X(S), the function is different from the established EJC assembly (PubMed:22203037). Involved in craniofacial development (PubMed:24360810)..

### Validation Data:

### eIF4A3 Rabbit mAb [3IOR] Images



Western blot (SDS PAGE) analysis of extracts from Raji cells .Using eIF4A3Rabbit mAb [3IOR] at dilution of 1:1000 incubated at  $4^{\circ}$ C over night.

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