

eIF4A3 Rabbit mAb

Catalog No: #52263

Package Size: #52263-1 50ul #52263-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

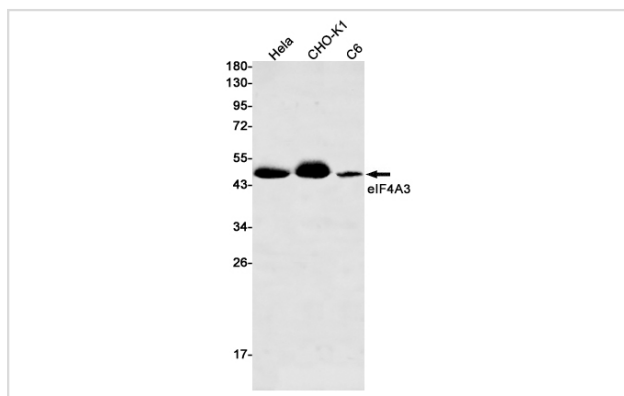
Description

Product Name	eIF4A3 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	S05-1B7
Isotype	Rabbit IgG
Purification	Affinity Purified
Applications	WB IHC IF
Species Reactivity	Human,Mouse,Rat
Immunogen Description	A synthetic peptide of human Eif4a3
Conjugates	Unconjugated
Modification	Unmodification
Other Names	Fal1; RCPS; DDX48; MUK34; NUK34; NMP265; eIF4AIII
Accession No.	Swiss-Prot:P38919GenelD:9775
Uniprot	P38919
GenelD	9775
Calculated MW	Calculated MW: 47 kDa; Observed MW: 47 kDa
Concentration	0.3 mg/ml
Formulation	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

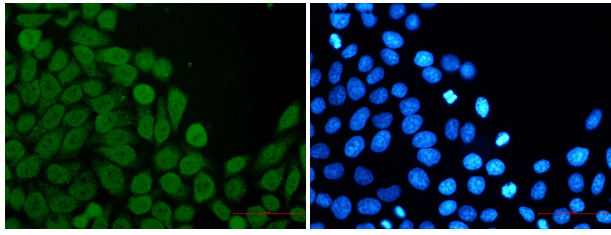
Application Details

WB: 1/1000; IHC: 1/20; ICC/IF: 1/100;

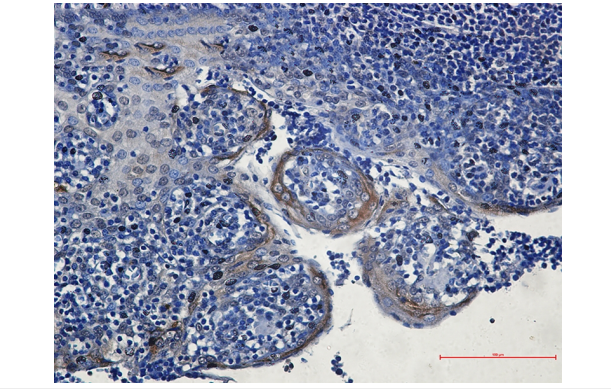
Images



Western blot detection of eIF4A3 in HeLa,CHO-K1,C6 cell lysates using eIF4A3 Rabbit mAb(1:500 diluted).Predicted band size:47kDa.Observed band size:47kDa.



Immunofluorescence of Eif4a3 (green) in HeLa using Eif4a3 Rabbit mAb at dilution 1/5, and DAPI(blue)



Immunohistochemistry of Eif4a3 in paraffin-embedded Human tonsil using Eif4a3 Rabbit mAb at dilution 1/50

Background

Swiss-Prot Acc.P38919.ATP-dependent RNA helicase (PubMed:16170325). Involved in pre-mRNA splicing as component of the spliceosome (PubMed:11991638, PubMed:22961380, PubMed:28502770, PubMed:28076346). Core component of the splicing-dependent multiprotein exon junction complex (EJC) deposited at splice junctions on mRNAs. 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-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 exon-exon 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).

Note: This product is for in vitro research use only