Product Name: KD-Validated Eukaryotic Translation Initiation Factor 2A Recombinant Rabbit Monoclonal Antibody
Catalog #: KVAb01120
For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 65.0kDa

Antigen Information

Gene Name	EIF2A
Alternative Names	EIF2A; 65 kDa eukaryotic translation initiation factor 2; Eukaryotic translation initiation factor 2A; ACDA02; EIF 2A; CDA02; MSTP004; MSTP089; EIF2; eif2a; eIF-2A
Gene ID	83939.0
SwissProt ID	Q9BY44
Immunogen	A synthesized peptide derived from human eIF2A

Background

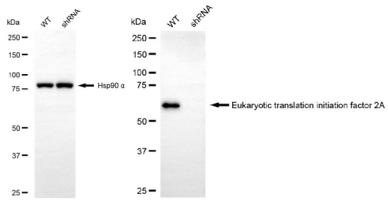
This gene encodes a eukaryotic translation initiation factor that catalyzes the formation of puromycin-sensitive 80 S preinitiation complexes and the poly(U)-directed synthesis of polyphenylalanine at low concentrations of Mg2+. This gene

should not be confused with eIF2-alpha (EIF2S1, Gene ID: 1965), the alpha subunit of the eIF2 translation initiation complex. Although both of these proteins function in binding initiator tRNA to the 40 S ribosomal subunit, the encoded protein does so in a codon-dependent manner, whereas eIF2 complex requires GTP. Alternative splicing of this gene results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jan 2016]

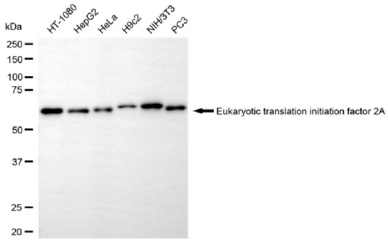
Research Area

Epigenetics and Nuclear Signaling

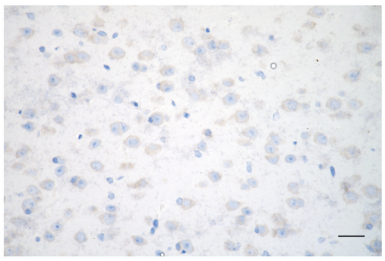
Image Data



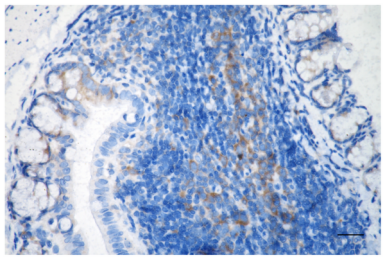
Western blotting analysis using eukaryotic translation initiation factor 2A antibody (KVAb01120). Eukaryotic translation initiation factor 2A expression in wild-type (WT) and eukaryotic translation initiation factor 2A (EIF2A) shRNA knockdown (KD) HepG2 cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with eukaryotic translation initiation factor 2A antibody (KVAb01120, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



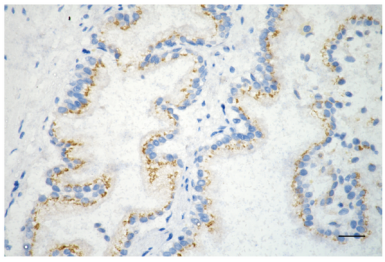
Western blotting analysis using eukaryotic translation initiation factor 2A antibody (KVAb01120). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with eukaryotic translation initiation factor 2A antibody (KVAb01120, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



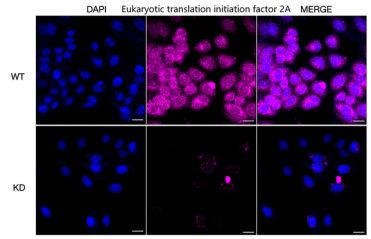
Immunohistochemistry was performed on paraffin-embedded mouse brain using eukaryotic translation initiation factor 2A antibody (KVAb01120, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



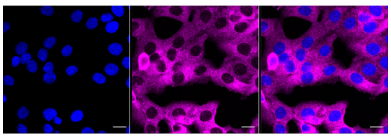
Immunohistochemistry was performed on paraffin-embedded mouse colon tissue using eukaryotic translation initiation factor 2A antibody (KVAb01120, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



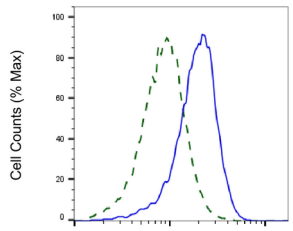
Immunohistochemistry was performed on paraffin-embedded human prostatic adenocarcinoma using eukaryotic translation initiation factor 2A antibody (KVAb01120, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunocytochemical staining of HeLa cells using eukaryotic translation initiation factor 2A antibody (KVAb01120, 1:1,000), Top panel: wild-type (WT); Bottom panal: EIF2A shRNA knockdown (KD). Nuclei were stained blue with DAPI; Eukaryotic translation initiation factor 2A was stained magenta with Alexa Fluor® 647. Scale bar, 20 μm.

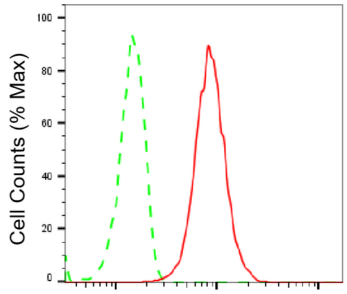


Immunocytochemical staining of HT-1080 cells with Eukaryotic translation initiation factor 2A antibody (KVAb01120, 1:1,000). Nuclei were stained blue with DAPI; Eukaryotic translation initiation factor 2A was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 μm.



Eukaryotic translation initiation factor 2A-Alexa Fluor® 647

Validation of Eukaryotic translation initiation factor 2A knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HepG2 cells were stained with Eukaryotic translation initiation factor 2A antibody (KVAb01120, 1:2,000) and analyzed using BD flow cytometer.



Eukaryotic translation initiation factor 2A-Alexa Fluor® 647

Flow cytometric analysis of Eukaryotic translation initiation factor 2A expression in HepG2 cells using Eukaryotic translation initiation factor 2A antibody (KVAb01120, 1:2,000). Green, isotype control; red, Eukaryotic translation initiation factor 2A.