

Product Name: KD-Validated eIF-2A Protein Kinase 2 Mouse Monoclonal Antibody
Catalog #: KVA00674

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB,FCM,ICC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Mouse 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 1:2,500-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 62.1kDa

Antigen Information

Gene Name	EIF2AK2
Alternative Names	eIF-2A protein kinase 2; Protein kinase RNA-activated; PKR; p68 kinase; P1/eIF-2A protein kinase
Gene ID	5610.0
SwissProt ID	P19525
Immunogen	Recombinant protein of human EIF2AK2

Background

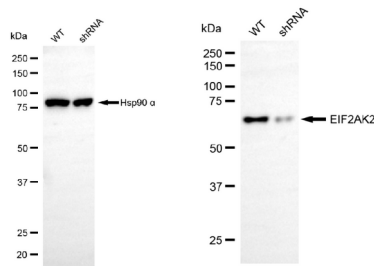
The protein encoded by this gene is a serine/threonine protein kinase that is activated by autophosphorylation after binding to dsRNA. The activated form of the encoded protein can phosphorylate translation initiation factor EIF2S1, which in turn inhibits protein synthesis. This protein is also activated by manganese ions and heparin. The encoded protein plays an important role in

the innate immune response against multiple DNA and RNA viruses. [provided by RefSeq, Jul 2021]

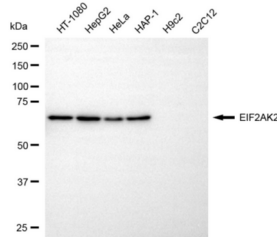
Research Area

Signal Transduction

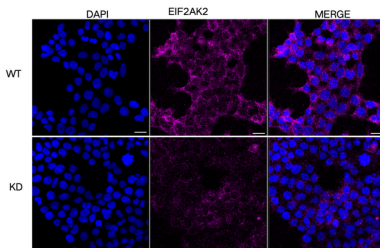
Image Data



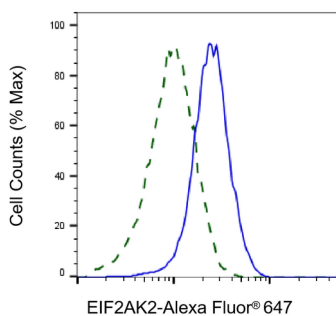
Western blotting analysis using EIF2AK2 antibody (KVA00674). EIF2AK2 expression in wild type (WT) and EIF2AK2 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with EIF2AK2 antibody (KVA00674, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



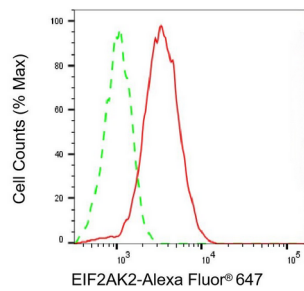
Western blotting analysis using EIF2AK2 antibody (KVA00674). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with EIF2AK2 antibody (KVA00674, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively. EIF2AK2, eukaryotic translation initiation factor 2 alpha kinase 2.



Immunocytochemical staining of HeLa cells using EIF2AK2 antibody (KVA00674, 1:1,000), Top panel: wild-type (WT); Bottom panel: EIF2AK2 shRNA knockdown (KD). Nuclei were stained blue with DAPI; EIF2AK2 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm.



Validation of EIF2AK2 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with EIF2AK2 antibody (KVA00674, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of EIF2AK2 expression in HepG2 cells using EIF2AK2 antibody (KVA00674, 1:2,000). Green, isotype control; red, EIF2AK2.