

[KD Validated] Anti-EIF2AK2 Mouse mAb

Purified Recombinant Mouse Monoclonal Antibody

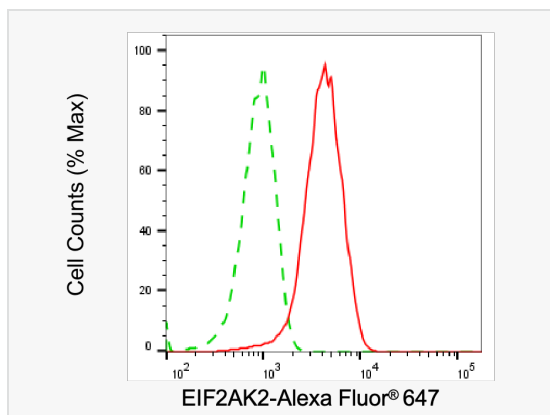
Catalog # M020679

Product Information

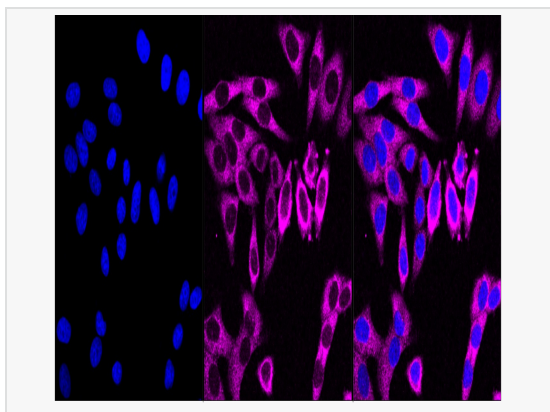
Application	WB, FC, IF (Cell)/ICC
Reactivity	Human
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000
Host	Mouse
Clonality	Monoclonal
Clone No.	72R20N66
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant protein of human PKR
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-EIF2AK2 Mouse mAb [72R20N66] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

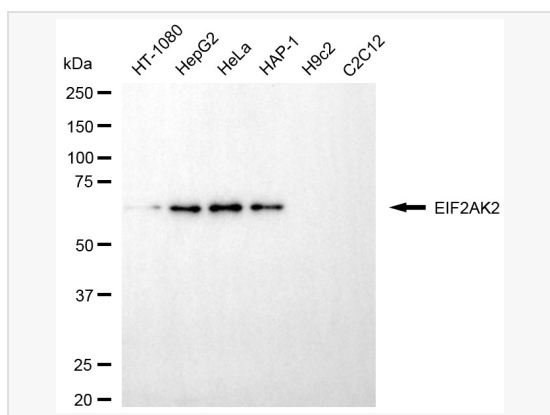
Synonyms	EIF2AK2; Eukaryotic Translation Initiation Factor 2 Alpha Kinase 2; PKR; Protein Kinase R; PPP1R83; PRKR; Protein Kinase, Interferon-Inducible Double Stranded RNA Dependent; Interferon-Induced, Double-Stranded RNA-Activated Protein Kinase; Protein Phosphatase 1, Regulatory Subunit 83; Tyrosine-Protein Kinase EIF2AK2; Protein Kinase RNA-Activated; Protein Kinase RNA-Regulated; P1/EIF-2A Protein Kinase; EIF-2A Protein Kinase 2; P68 Kinase; Eukaryotic Translation Initiation Factor 2-Alpha Kinase 2; Interferon-Inducible RNA-Dependent Protein Kinase; Double Stranded RNA Activated Protein Kinase; Interferon-Inducible EIF2alpha Kinase; EC 2.7.11.1; EC 2.7.10.2; EIF2AK1; LEUDEN; DYT33.
Calculated MW	Calculated MW: 62 kDa; Observed MW: 68 kDa
Uniprot ID	P19525
Gene ID	5610
Background	PKR a protein kinase of the PEK family. Upon binding double-stranded RNA, it becomes autophosphorylated and activated. Phosphorylates and inhibits the alpha subunit of eIF2 alpha, which leads to an inhibition of the initiation of protein synthesis.



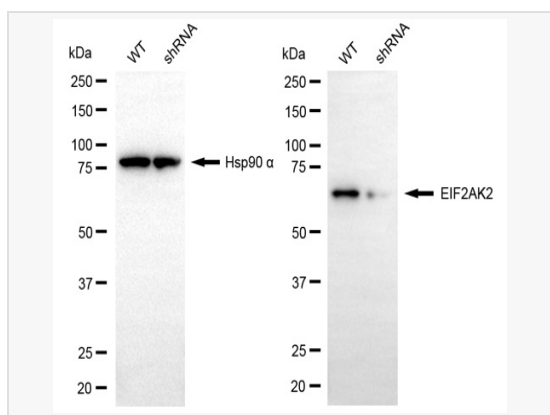
Flow cytometric analysis of EIF2AK2 expression in HepG2 cells using EIF2AK2 antibody (M020679, 1:2,000). Green, isotype control; red, EIF2AK2.



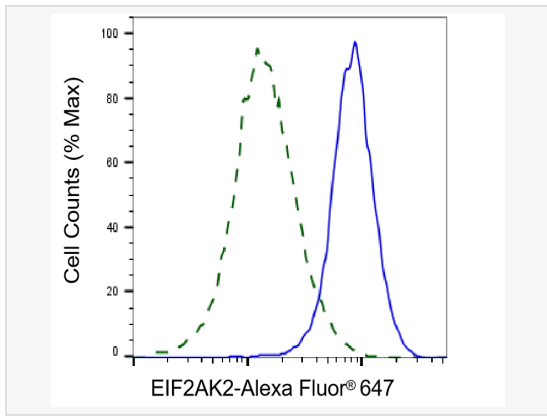
Immunocytochemical staining of HepG2 cells with EIF2AK2 antibody(M020679, 1:1,000) . Nuclei were stained blue with DAPI; EIF2AK2 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 μ m.



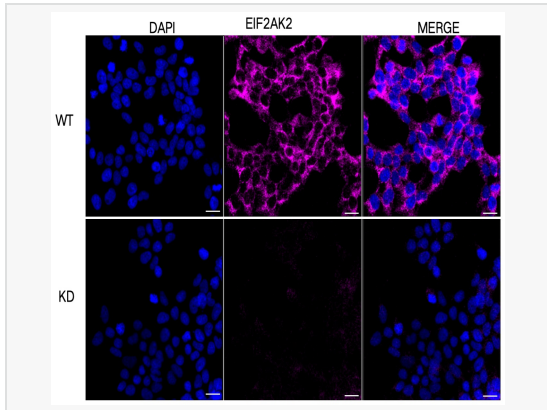
Western blotting analysis using EIF2AK2 antibody (M020679). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with EIF2AK2 antibody (M020679, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit. EIF2AK2, eukaryotic translation initiation factor 2 alpha kinase 2.



Western blotting analysis using EIF2AK2 antibody (M020679). EIF2AK2 expression in wild-type (WT) and EIF2AK2 shRNA knockdown (KD) HeLa cells with 20 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with EIF2AK2 antibody (M020679, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Validation of EIF2AK2 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with EIF2AK2 antibody (M020679, 1:2,000) and analyzed using BD flow cytometer.



Immunocytochemical staining of HeLa cells using EIF2AK2 antibody (M020679, 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 μ m.