

# **Product datasheet for CF813289**

# OriGene Technologies, Inc.

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### PKR (EIF2AK2) Mouse Monoclonal Antibody [Clone ID: OTI3F5]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI3F5
Applications: IHC, WB

Recommended Dilution: WB 1:500, IHC 1:500

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

**Immunogen:** Human recombinant protein fragment corresponding to amino acids 51-191 of human

EIF2AK2 (NP\_001129123) produced in E.coli.

Formulation: Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

**Reconstitution Method:** For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

Predicted Protein Size: 61.9 kDa

**Gene Name:** eukaryotic translation initiation factor 2 alpha kinase 2

Database Link: NP 001129123

Entrez Gene 5610 Human

P19525





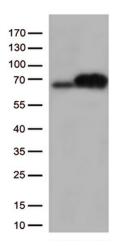
Background:

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. Three transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Oct 2011]

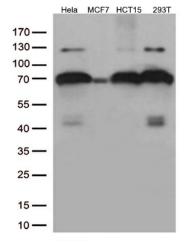
**Synonyms:** EIF2AK1; LEUDEN; PKR; PPP1R83; PRKR

**Protein Families:** Druggable Genome, Protein Kinase, Transcription Factors

# **Product images:**

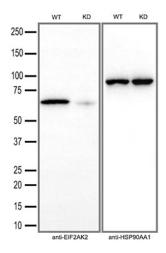


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY EIF2AK2 (Cat# [RC226606], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-EIF2AK2 (Cat# [TA813289])(1:500).

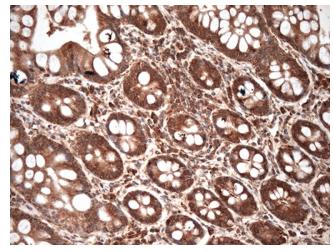


Western blot analysis of extracts (35ug) from 4 cell lines lysates by using anti-EIF2AK2 monoclonal antibody (1:500).

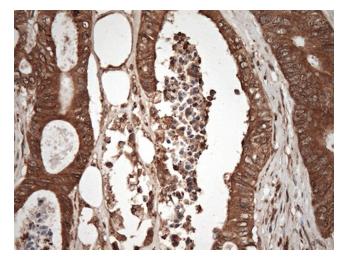




Equivalent amounts of cell lysates (30 ug per lane) of wild-type HeLa cells(WT) and EIF2AK2-Knockdown HeLa cells(KD) were separated by SDS-PAGE and immunoblotted with anti-EIF2AK2 monoclonal antibody [TA813289](1:5000). Then the blotted membrane was stripped and reprobed with anti-HSP90AA1 antibody as a loading control.

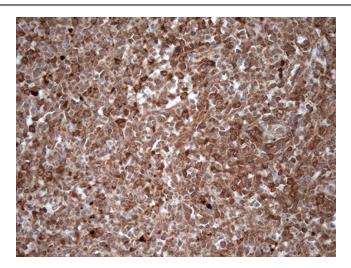


Immunohistochemical staining of paraffinembedded Human colon tissue within the normal limits using anti-EIF2AK2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human colon tissue using anti-EIF2AK2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.





Immunohistochemical staining of paraffinembedded Human spleen tissue within the normal limits using anti-EIF2AK2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.