

DATASHEET

EIF2AK1 Rabbit Polyclonal Antibody

CAT. NO. APA10747

KEY FEATURES

| | | | |
|---------------|---|---------------|---------------------|
| Target | EIF2AK1 | Source / Host | Rabbit |
| Reactivity | Human, Mouse, Rat | Clonality | Polyclonal |
| Applications | WB, IHC | Conjugation | Unconjugated |
| Form / Buffer | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. | | Storage at -20°C |

BACKGROUND

Metabolic-stress sensing protein kinase that phosphorylates the alpha subunit of eukaryotic translation initiation factor 2 (EIF2S1/eIF-2-alpha) in response to various stress conditions in response to various stress conditions . Key activator of the integrated stress response (ISR) required for adaptation to various stress, such as heme deficiency, oxidative stress, osmotic shock, mitochondrial dysfunction and heat shock . EIF2S1/eIF-2-alpha phosphorylation in response to stress converts EIF2S1/eIF-2-alpha in a global protein synthesis inhibitor, leading to a global attenuation of cap-dependent translation, while concomitantly initiating the preferential translation of ISR-specific mRNAs, such as the transcriptional activator ATF4, and hence allowing ATF4-mediated reprogramming .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

| | |
|-----|----------------|
| WB | 1:500 - 1:1000 |
| IHC | 1:50 - 1:100 |

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

| | |
|-------------------|--|
| Description | Rabbit polyclonal antibody to EIF2AK1 |
| Specificity | Recognizes endogenous levels of EIF2AK1 protein. |
| Antibody Type | Primary antibody |
| Immunogen | KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human EIF2AK1. The exact sequence is proprietary. |
| Purification | The antibody was purified by immunogen affinity chromatography. |
| Molecular Weight | Predicted: 71 kD; Observed: 71 kD |
| Form/Buffer | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. |
| Alternative Names | HRI; KIAA1369; Eukaryotic translation initiation factor 2-alpha kinase 1; Heme-controlled repressor; HCR; Heme-regulated eukaryotic initiation factor eIF-2-alpha kinase; Heme-regulated inhibitor; Hemin-sensitive initiation factor 2-alpha kinase |
| Gene Symbol | EIF2AK1 |
| Entrez Gene | 27102(Human); 15467(Mouse); 27137(Rat) |
| SwissProt | Q9BQI3(Human); Q9Z2R9(Mouse); Q63185(Rat) |

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

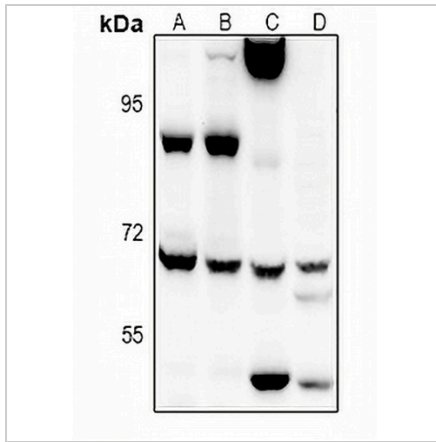
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

DATASHEET

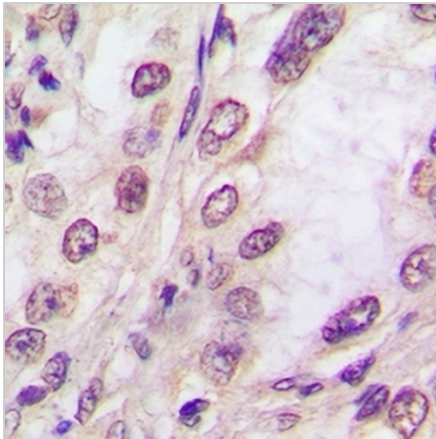
EIF2AK1 Rabbit Polyclonal Antibody

CAT. NO. APA10747

DATA



Western blot analysis of EIF2AK1 expression in K562 (A), LO2 (B), PC12 (C), AML12 (D) whole cell lysates. (Predicted band size: 71 kD; Observed band size: 71 kD)



Immunohistochemical analysis of EIF2AK1 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.