

Rabbit anti-Human, Rat EIF2AK1 Polyclonal Antibody | anti-EIF2AK1 antibody

EIF2AK1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA233199	Rabbit	Human, Rat	Immunofluorescence, Immunohistochemistry, Western Blot, ELISA

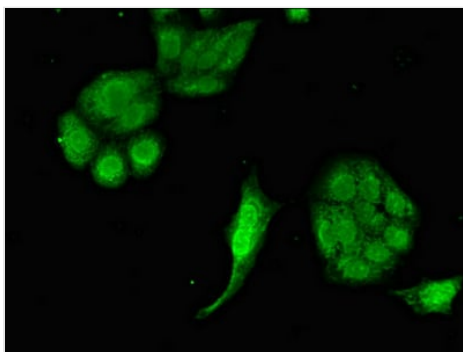
PRODUCT SYNONYMS

EIF2AK1; Polyclonal Antibody; EIF2AK1 Antibody; 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; HRI; KIAA1369; PRO1362; anti-EIF2AK1 antibody

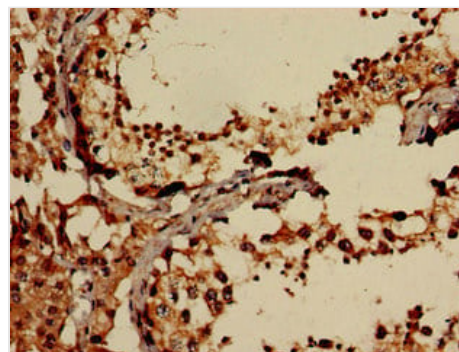
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Isotype	IgG
Purity/Purification	>95%, Protein G purified
Form/Format	Liquid; Preservative: 0.03% Proclin 300; Constituents: 50% Glycerol, 0.01M PBS, pH 7.4
Sequence Length	629
Applicable Applications for anti-EIF2AK1 antibody	IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot), ELISA
Immunogen	Recombinant Human Eukaryotic translation initiation factor 2-alpha kinase 1 protein (1-86AA)
Immunogen Species	Homo sapiens (Human)
Conjugation	Non-conjugated
Research Area	Epigenetics and Nuclear Signaling
Preparation and Storage	Upon receipt, store at -20 degree C or -80 degree C. Avoid repeated freeze.

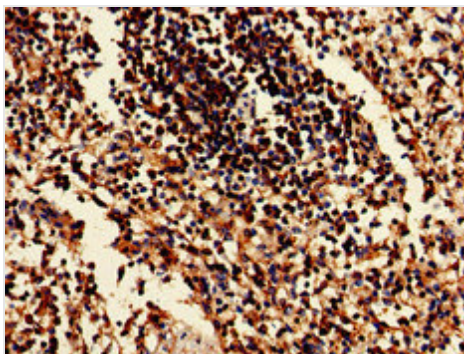
IMAGES


IF (Immunofluorescence)

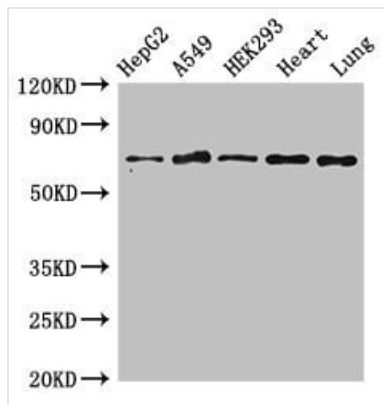
Immunofluorescent analysis of HepG2 cells using AAA233199 at a dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)


IHC (Immunohistochemistry)

Immunohistochemistry of paraffin-embedded human testis tissue using AAA233199 at dilution of 1:100



IHC (Immunohistochemistry)
Immunohistochemistry of paraffin-embedded human spleen tissue using AAA233199 at dilution of 1:100



WB (Western Blot)
Western BlotPositive WB detected in: HepG2 whole cell lysate,A549 whole cell lysate,HEK293 whole cell lysate,Rat heart tissue,Rat lung tissueAll lanes: EIF2AK1 antibody at 3ug/mlSecondaryGoat polyclonal to rabbit IgG at 1/50000 dilutionPredicted band size: 92 KDaObserved band size: 72 KDa

ADDITIONAL INFORMATION

Related Product Information for anti-EIF2AK1 antibody

Inhibits protein synthesis at the translation initiation level, in response to various stress conditions, including oxidative stress, heme deficiency, osmotic shock and heat shock. Exerts its function through the phosphorylation of EIF2S1 at 'Ser-48' and 'Ser-51', thus preventing its recycling. Binds heme forming a 1:1 complex through a cysteine thiolate and histidine nitrogenous coordination. This binding occurs with moderate affinity, allowing it to sense the heme concentration within the cell. Thanks to this unique heme-sensing capacity, plays a crucial role to shut off protein synthesis during acute heme-deficient conditions. In red blood cells (RBCs), controls hemoglobin synthesis ensuring a coordinated regulation of the synthesis of its heme and globin moieties. Thus plays an essential protective role for RBC survival in anemias of iron deficiency. Similarly, in hepatocytes, involved in heme-mediated translational control of CYP2B and CYP3A and possibly other hepatic P450 cytochromes. May also contain ER stress during acute heme-deficient conditions (By similarity).

NCBI AND UNIPROT INFORMATION

NCBI GI #	197245437
NCBI GeneID	27102
NCBI Accession #	NP_001127807.1
NCBI GenBank Nucleotide #	NM_001134335.1
UniProt Accession #	Q9BQI3; Q549K6; Q8NBW3; Q9HC02; Q9NYE0; Q9P0V6; Q9P1J5; Q9P2H8; Q9UHG4; A8K2R2
NCBI Official Full Name	eukaryotic translation initiation factor 2-alpha kinase 1 isoform b
NCBI Official Synonym Full Names	eukaryotic translation initiation factor 2 alpha kinase 1
NCBI Official Symbol	EIF2AK1
NCBI Official Synonym Symbols	HCR; HRI
NCBI Protein Information	eukaryotic translation initiation factor 2-alpha kinase 1
UniProt Protein Name	Eukaryotic translation initiation factor 2-alpha kinase 1
UniProt Gene Name	EIF2AK1
UniProt Synonym Gene Names	HRI; KIAA1369; HCR

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.