Datasheet for ABIN7113933

anti-EIF2AK1 antibody

Go to Product page

Overview

Quantity:	100 µg
Target:	EIF2AK1
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This EIF2AK1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC)

Product Details

Immunogen:	eukaryotic translation initiation factor 2-alpha kinase 1
Isotype:	IgG
Purification:	Immunogen affinity purified
Purity:	≥95 % as determined by SDS-PAGE

Target Details

Target:	EIF2AK1
Alternative Name:	EIF2AK1 (EIF2AK1 Products)
Background:	Synonyms:EIF2AK1, HCR, HRI, eukaryotic translation initiation factor 2-alpha kinase 1 Background: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

Target Details

	preventing its recycling. Binds hemin 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).
Molecular Weight:	60-71 kDa
Gene ID:	27102
UniProt:	Q9BQI3
Pathways:	Hepatitis C

Application Details

Application Notes:	WB: 1:500 - 1:2000, IHC: 1:50 - 1:200
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide and 50 % glycerol pH 7.3,
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	-20°C for 12 months (Avoid repeated freeze / thaw cycles.)
Expiry Date:	12 months