

anti- EIF2AK1 antibody

Product Information

Catalog No.: FNab02690

Size: 100μg Form: liquid

Purification: Immunogen affinity purified

Purity: ≥95% as determined by SDS-PAGE

Host: Rabbit

Clonality: polyclonal

Clone ID: None IsoType: IgG

Storage: PBS with 0.02% sodium azide and 50% glycerol pH 7.3, -20°C for 12

months (Avoid repeated freeze / thaw cycles.)

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 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).

Immunogen information

Immunogen: eukaryotic translation initiation factor 2-alpha kinase 1

Synonyms: EIF2AK1, HCR, HRI, eukaryotic translation initiation factor 2-alpha

kinase 1

Observed MW: 71 kDa

Wuhan Fine Biotech Co., Ltd.

B9 Bld, High-Tech Medical Devices Park, No. 818 Gaoxin Ave. East Lake High-Tech Development Zone. Wuhan, Hubei, China (430206)

Tel:(0086)027-87384275 Fax: (0086)027-87800889 <u>www.fn-test.com</u>

1



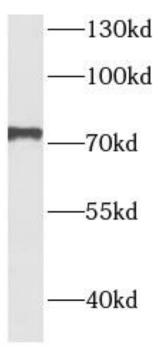
Uniprot ID: Q9BQI3

Application

Reactivity: Human, Mouse
Tested Application: ELISA, WB

Recommended dilution: WB: 1:500 - 1:2000

Image:



HL-60 cells were subjected to SDS PAGE

followed by western blot with

FNab02690(EIF2AK1 antibody) at dilution of

1:1000