

## anti- EIF2AK1 antibody

### Product Information

|               |   |
|---------------|---|
| Catalog No.:  | FNab10450   |
| 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 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).

### 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: | 60-71 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

[www.fn-test.com](http://www.fn-test.com)

Uniprot ID : Q9BQI3

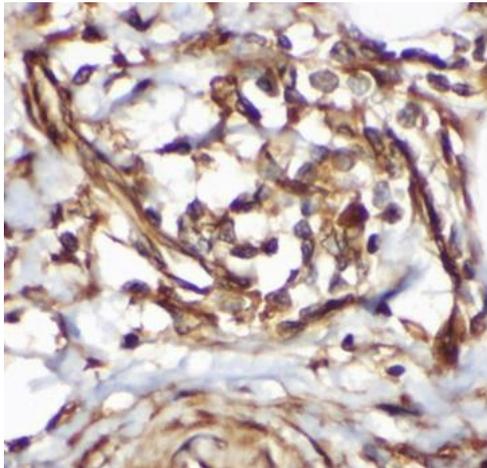
### Application

Reactivity: Human, Mouse, Rat

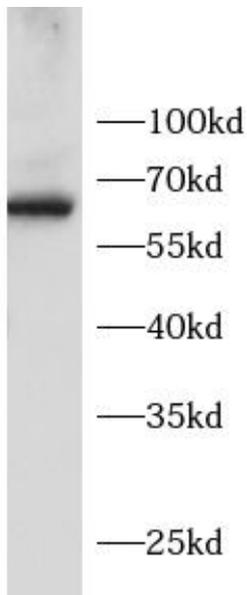
Tested Application: ELISA, WB, IHC

Recommended dilution: WB: 1:500 - 1:2000; IHC: 1:50 - 1:200

Image:



Immunohistochemical of paraffin-embedded human colon using FNab10450(EIF2AK1 antibody) at dilution of 1:100



HepG2 cells were subjected to SDS PAGE followed by western blot with FNab10450(EIF2AK1 antibody) at dilution of 1:1000

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