

Product datasheet

Anti-EIF2AK1 antibody ab62895

1 图像

概述

产品名称	Anti-EIF2AK1抗体
描述	兔多克隆抗体to EIF2AK1
经测试应用	适用于: ELISA, IHC-P
种属反应性	与反应: Human
免疫原	KLH conjugated synthetic peptide selected from the centre region of human EIF2AK1.
阳性对照	Human lung carcinoma tissue.

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term.
存储溶液	Preservative: 0.09% Sodium Azide Constituents: PBS
纯度	Protein A purified
纯化说明	ab62895 is purified through a protein A column, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS.
克隆	多克隆
同种型	IgG

应用

Our [Abpromise guarantee](#) covers the use of **ab62895** in the following tested applications.

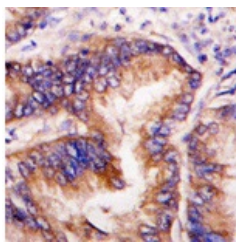
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用	Ab评论	说明
ELISA		1/1000.
IHC-P		1/10 - 1/50.

靶标

功能	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.
组织特异性	Expressed predominantly in erythroid cells. At much lower levels, expressed in hepatocytes (at protein level).
序列相似性	Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. GCN2 subfamily. Contains 2 HRM (heme regulatory motif) repeats. Contains 1 protein kinase domain.
翻译后修饰	Activated by autophosphorylation; phosphorylated predominantly on serine and threonine residues, but also on tyrosine residues. Autophosphorylation at Thr-488 is required for kinase activation. The active autophosphorylated form apparently is largely refractory to cellular heme fluctuations.
细胞定位	Cytoplasm.

图片



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - EIF2AK1 antibody (ab62895)

ab62895 at 1/10 - 1/50 dilution, staining EIF2AK1 in human lung carcinoma by Immunohistochemistry using formalin-fixed, paraffin-embedded tissue. ab62895 was peroxidase-conjugated to the secondary antibody, followed by DAB staining.

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