# abcam

## Product datasheet

## Anti-EIF2S1 antibody ab26197

★★★★★ 6 Abreviews 37 References 3 图像

## 概述

产**品名称** Anti-EIF2S1抗体

描述 兔多克隆抗体to EIF2S1

**宿主** Rabbit

经测试应用 适用于: ICC/IF, WB

种属反应性 与反应: Mouse, Human, Drosophila melanogaster

预测可用于: Rat 🕰

免疫原 Synthetic peptide corresponding to Human EIF2S1 aa 50-150 conjugated to keyhole limpet

haemocyanin. Synthetic peptide conjugated to KLH derived from within residues 50 - 150 of

Human elF2 alpha. 参阅Abcam的专有抗源政策

阳性对照 Recombinant Human EIF2S1 protein (ab123468) can be used as a positive control in WB. HeLa

Whole Cell Lysate Jurkat Whole Cell Lysate A431 Whole Cell Lysate NIH 3T3 Whole Cell Lysate

MEF1 Whole Cell Lysate

常规说明

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

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 or -

80°C. Avoid freeze / thaw cycle.

**存储溶液** pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

scientific support team who will be happy to help.

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纯**度** Immunogen affinity purified

ΙgG

**克隆** 多克隆

应用

同种型

## The Abpromise guarantee Abpromise™承诺保证使用ab26197于以下的经测试应用

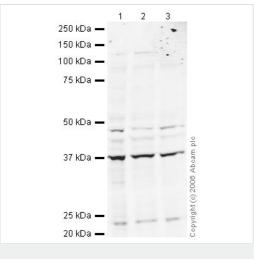
"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF		Use a concentration of 1 µg/ml.
WB	**** <u>(6)</u>	Use at an assay dependent concentration. Detects a band of approximately 36 kDa (predicted molecular weight: 36 kDa).

<b>靶</b> 标	
功能	Functions in the early steps of protein synthesis by forming a ternary complex with GTP and initiator tRNA. This complex binds to a 40S ribosomal subunit, followed by mRNA binding to form a 43S preinitiation complex. Junction of the 60S ribosomal subunit to form the 80S initiation complex is preceded by hydrolysis of the GTP bound to eIF-2 and release of an eIF-2-GDP binary complex. In order for eIF-2 to recycle and catalyze another round of initiation, the GDP bound to eIF-2 must exchange with GTP by way of a reaction catalyzed by eIF-2B.
序列相似性	Belongs to the elF-2-alpha family.  Contains 1 S1 motif domain.
翻译后修饰	Substrate for at least 4 kinases: EIF2AK1/HRI, EIF2AK2/PKR, EIF2AK3/PERK and EIF2AK4/GCN2. Phosphorylation stabilizes the eIF-2/GDP/eIF-2B complex and prevents GDP/GTP exchange reaction, thus impairing the recycling of eIF-2 between successive rounds of initiation and leading to global inhibition of translation (PubMed:15207627, PubMed:18032499). Phosphorylated; phosphorylation on Ser-52 by the EIF2AK4/GCN2 protein kinase occurs in response to amino acid starvation and UV irradiation.
细胞定位	Cytoplasmic granule. The cytoplasmic granules are stress granules which are a dense aggregation in the cytosol composed of proteins and RNAs that appear when the cell is under

stress. Colocalizes with NANOS3 in the stress granules (By similarity).

图片



Western blot - Anti-EIF2S1 antibody (ab26197)

All lanes: Anti-EIF2S1 antibody (ab26197) at 1 μg/ml

Lane 1: HeLa whole cell lysate

Lane 2 : Jurkat whole cell lysate (<u>ab7899</u>)
Lane 3 : A-431 whole cell lysate (<u>ab7909</u>)

Lysates/proteins at 20 µg per lane.

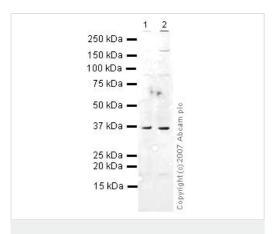
### **Secondary**

**All lanes :** Goat polyclonal to Rabbit lgG (Alexa Fluor® 680) at 1/10000 dilution

Performed under reducing conditions.

**Predicted band size:** 36 kDa **Observed band size:** 36 kDa

ab26197 detects a band of  $\sim$  36 kDa in HeLa, Jurkat and A431 whole cell lysates. This corresponds to the predicted molecular weight for elF2 alpha according to Swiss prot. A number of other bands are detected at  $\sim$  48, 23 and 15 kDa. We do not know the identity of these bands and we predict they represent non-specific binding.



Western blot - Anti-EIF2S1 antibody (ab26197)

All lanes: Anti-EIF2S1 antibody (ab26197) at 1 µg/ml

Lane 1: NIH/3T3 whole cell lysate (ab7179)

Lane 2 : MEF1 (Mouse embryonic fibroblast cell line) Whole Cell Lysate

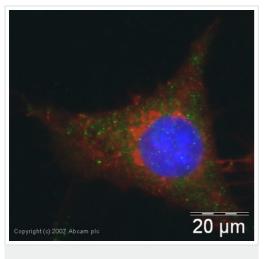
Lysates/proteins at 10 µg per lane.

## Secondary

**All lanes :** IRDye 680 Conjugated Goat Anti-Rabbit lgG (H+L) at 1/10000 dilution

Performed under reducing conditions.

**Predicted band size:** 36 kDa **Observed band size:** 36 kDa



Immunocytochemistry/ Immunofluorescence - Anti-EIF2S1 antibody (ab26197) ICC/IF image of ab26197 stained human HeLa cells. The cells were 4% PFA fixed (10 min), permabilised in TBS-T (20 min) and incubated with the antibody (ab26197, 1µg/ml) for 1h at room temperature. 1%BSA / 10% normal goat serum / 0.3M glycine was used to quench autofluorescence and block non-specific protein-protein interactions. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red). DAPI was used to stain the cell nuclei (blue).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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