

# Anti-EIF2S1 antibody [EPR23098-50] ab242148

**重组 RabMAb**

**2 References** [7 图像](#)

### 概述

产品名称	Anti-EIF2S1 抗体[EPR23098-50]
描述	兔单克隆抗体[EPR23098-50] to EIF2S1
宿主	Rabbit
经测试应用	<b>适用于:</b> IP, IHC-P, WB <b>不适用于:</b> Flow Cyt or ICC/IF
种属反应性	<b>与反应:</b> Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: MCF7, HepG2, HeLa, RAW264.7, C6, Human spleen, Rat kidney, Rat spleen and Mouse heart lysates. IHC-P: Human breast, Mouse kidney and Rat cerebrum tissues. IP: MCF7 cells.
常规说明	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> For more information <a href="#">see here</a> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .

### 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. Avoid freeze / thaw cycle.
存储溶液	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR23098-50

同种型

IgG

## 应用

The Abpromise guarantee

**Abpromise™** 承诺保证使用 ab242148 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
IP		1/30.
IHC-P		1/4000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/1000. Predicted molecular weight: 36 kDa.

应用说明

Is unsuitable for Flow Cyt or ICC/IF.

## 靶标

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 eIF-2-alpha family.  
Contains 1 S1 motif domain.

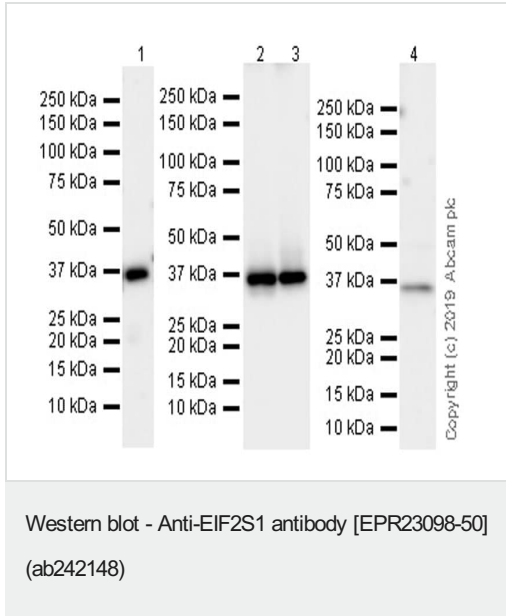
翻译后修饰

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



**All lanes** : Anti-EIF2S1 antibody [EPR23098-50] (ab242148) at 1/1000 dilution

**Lane 1** : Human spleen tissue lysate

**Lane 2** : Rat kidney tissue lysate

**Lane 3** : Rat spleen tissue lysate

**Lane 4** : Mouse heart tissue lysate

Lysates/proteins at 10 µg per lane.

### Secondary

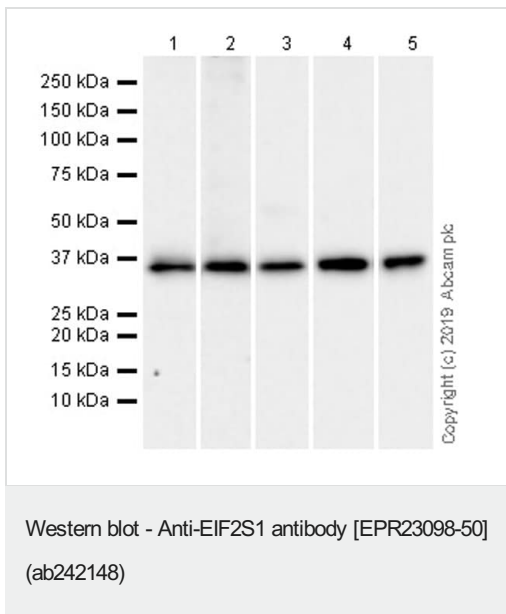
**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

**Predicted band size:** 36 kDa

**Observed band size:** 36 kDa

Blocking and diluting buffer and concentration: 5% NFD/MTBST.

Exposure time: Lane 1: 48 seconds Lanes 2-3: 15 seconds Lane 4: 59 seconds



**All lanes** : Anti-EIF2S1 antibody [EPR23098-50] (ab242148) at 1/1000 dilution

**Lane 1** : MCF7 (human breast adenocarcinoma epithelial cell), whole cell lysate

**Lane 2** : HepG2 (human hepatocellular carcinoma epithelial cell), whole cell lysate

**Lane 3** : HeLa (human cervix adenocarcinoma epithelial cell), whole cell lysate

**Lane 4** : RAW264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage), whole cell lysate

**Lane 5** : C6 (rat glial tumor glial cell), whole cell lysate

Lysates/proteins at 20 µg per lane.

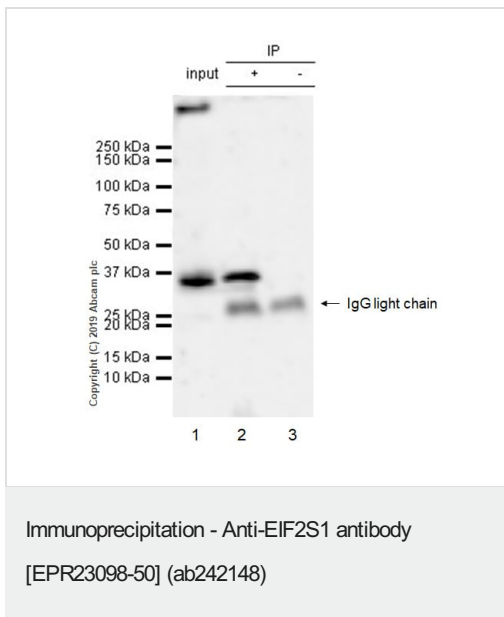
## Secondary

**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

**Predicted band size:** 36 kDa

**Observed band size:** 36 kDa

Blocking and diluting buffer and concentration: 5% NFDm/TBST  
Exposure time: Lanes 1/3-5: 10 seconds Lane 2: 81 seconds



EIF2S1 was immunoprecipitated from 0.35 mg MCF7 (human breast adenocarcinoma epithelial cell) whole cell lysate 10ug with ab242148 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab242148 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used at 1/5000 dilution.

Lane 1: MCF7 (human breast adenocarcinoma epithelial cell) whole cell lysate 10ug

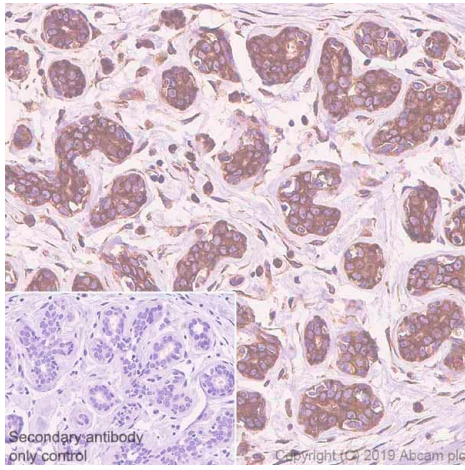
Lane 2: ab242148 IP in MCF7 whole cell lysate

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab242148 in MCF7 whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Exposure time: 50 seconds

This blot was developed using a higher sensitivity ECL substrate.

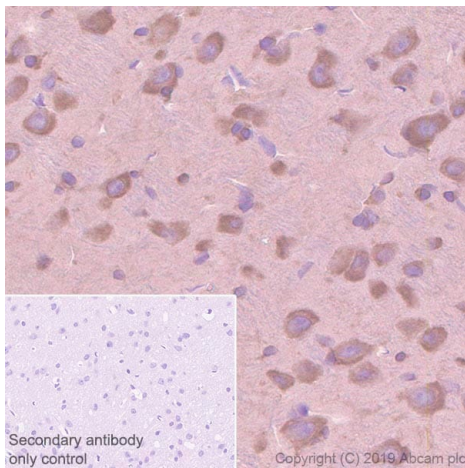


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EIF2S1 antibody [EPR23098-50] (ab242148)

Immunohistochemical analysis of paraffin-embedded Human breast tissue labeling EIF2S1 with ab242148 at 1:4000 dilution (0.14 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on human breast. The section was incubated with ab242148 for 15 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with citrate buffer (pH 6.0, epitope retrieval solution 1) for 20mins

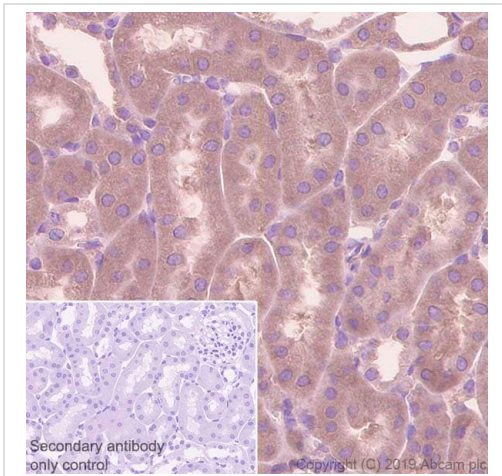


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EIF2S1 antibody [EPR23098-50] (ab242148)

Immunohistochemical analysis of paraffin-embedded Rat cerebrum tissue labeling EIF2S1 with ab242148 at 1:4000 dilution (0.14 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Cytoplasmic staining on rat cerebrum. The section was incubated with ab242148 for 15 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with citrate buffer (pH 6.0, epitope retrieval solution 1) for 20mins







Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EIF2S1 antibody [EPR23098-50] (ab242148)

Immunohistochemical analysis of paraffin-embedded Mouse kidney tissue labeling EIF2S1 with ab242148 at 1:4000 dilution (0.14 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Cytoplasmic staining mouse kidney. The section was incubated with ab242148 for 15 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with citrate buffer (pH 6.0, epitope retrieval solution 1) for 20mins

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-EIF2S1 antibody [EPR23098-50] (ab242148)

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

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