abcam

Product datasheet

Anti-EIF2S1 (phospho S51) antibody [E90] - BSA and Azide free ab214434

重组 RabMAb

18 References 11 图像

概述

产品名称	Anti-EIF2S1 (phospho S51)**抗体**[E90] - BSA and Azide free
描述	**兔单克隆抗体**[E90] to EIF2S1 (phospho S51) - BSA and Azide free
宿主	Rabbit
经测试应用	**适用于:** WB, IHC-P, Dot blot **不适用于:** Flow Cyt or ICC/IF
种属反应性	**与反应:** Mouse, Rat, Human, Neurospora crassa **预测可用于:** Cow, Pig, Drosophila melanogaster, Plants, African green monkey
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	IHC-P: Human liver carcinoma, breast carcinoma, cervical carcinoma, colon adenocarcinoma and hepatocellular carcinoma tissues. WB: HeLa cells treated with Clyculin A and phosphatase whole cell lysate; PC-12 cell lysate. Dot Blot: Antigen peptide.
常规说明	ab214434 is the carrier-free version of **ab32157**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production

For more information **see here**.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C. Do Not Freeze.
存储溶液	pH: 7.20 Constituent: PBS
无载体	是
纯度	Protein A purified
克隆	单克隆
克隆编号	E90
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab214434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
WB		Use at an assay dependent concentration. Detects a band of approximately 36 kDa (predicted molecular weight: 36 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
Dot blot		Use at an assay dependent concentration.

应用说明 Is unsuitable for Flow Cyt or ICC/IF.

靶标

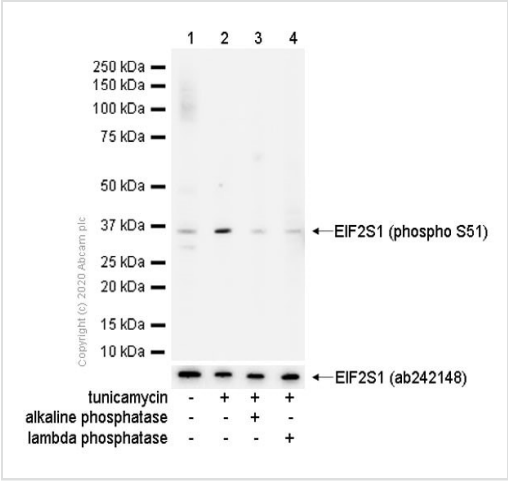
功能	Functions in the early steps of protein synthesis by forming a ternary complex with GTP and initiator tRNA. This complex binds to a 40S ribosomal subunit, followed by mRNA binding to form a 43S preinitiation complex. Junction of the 60S ribosomal subunit to form the 80S initiation complex is preceded 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



Western blot - Anti-EIF2S1 (phospho S51) antibody [E90] - BSA and Azide free (ab214434)

All lanes : Anti-EIF2S1 (phospho S51) antibody [E90] (**ab32157**) at 1/1000 dilution

Lane 1 : RAW 264.7 (Mouse Abelson murine leukemia virus-induced tumor macrophage) Whole cell lysates
Lane 2 : RAW 264.7 (Mouse Abelson murine leukemia virus-induced tumor macrophage) treated with 5 ug/ml tunicamycin for 18 hours whole cell lysates
Lane 3 : RAW 264.7 (Mouse Abelson murine leukemia virus-induced tumor macrophage) treated with 5 ug/ml tunicamycin for 18 hours whole cell lysates. Then the membrane was incubated with alkaline phosphatase.
Lane 4 : RAW 264.7 (Mouse Abelson murine leukemia virus-induced tumor macrophage) treated with 5 ug/ml tunicamycin for 18 hours whole cell lysates. Then the membrane was incubated with lambda phosphatase.

Lysates/proteins at 15 µg per lane.

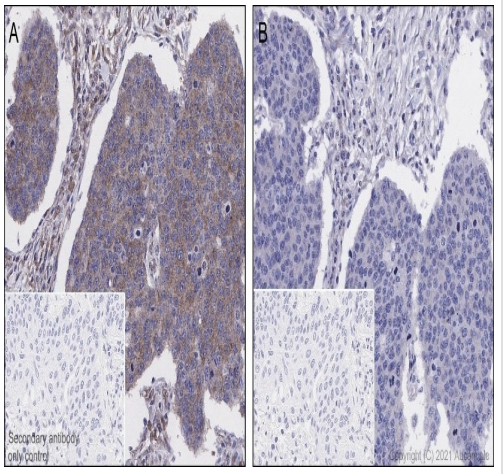
Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

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

Exposure time: 180 seconds

Blocking/Diluting buffer and concentration 5% NFDM/TBST

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32157**).

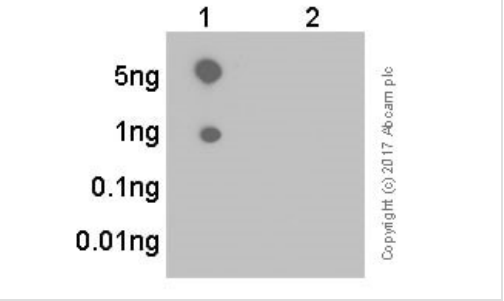


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EIF2S1 (phospho S51) antibody [E90] - BSA and Azide free (ab214434)

Immunohistochemical analysis of paraffin-embedded human lung cancer sections labeling EIF2S1 with **ab32157** at 1/4000 dilution (0.37 µg/mL). Hematoxylin was used as counterstain. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Antigen retrieval was heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) for 20 minutes.

Positive staining on human lung cancer without alkaline phosphatase treatment (image A). No staining on human lung cancer with alkaline phosphatase treatment (image B)
The section was incubated with **ab32157** for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32157**).



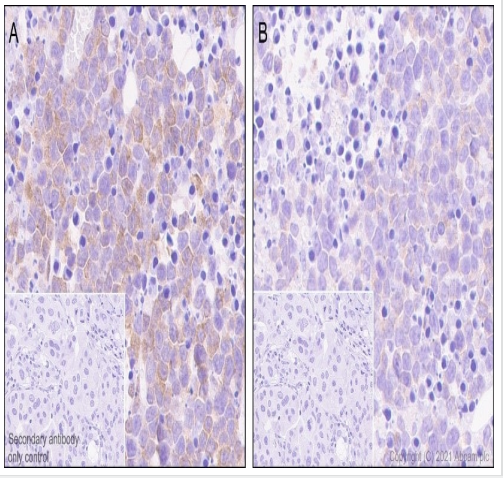
Dot Blot - Anti-EIF2S1 (phospho S51) antibody [E90] - BSA and Azide free (ab214434)

Dot blot analysis of EIF2S1 (pS51) phospho peptide (Lane 1), EIF2S1 non-phospho peptide (Lane 2) with **ab32157** at a dilution of 1/1000. **ab97051** (Peroxidase conjugated goat anti-rabbit IgG (H+L)) was used as the secondary antibody at a dilution of 1/100000.

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 3 minutes.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32157**).

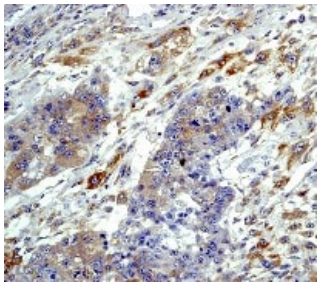


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EIF2S1 (phospho S51) antibody [E90] - BSA and Azide free (ab214434)

Immunohistochemical analysis of paraffin-embedded mouse pancreatic cancer sections labeling EIF2S1 with **ab32157** at 1/4000 dilution (0.37 µg/mL). Hematoxylin was used as counterstain. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Antigen retrieval was heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) for 20 minutes.

Positive staining on mouse pancreatic cancer without alkaline phosphatase treatment (image A). No staining on mouse pancreatic cancer with alkaline phosphatase treatment (image B) The section was incubated with **ab32157** for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32157**).

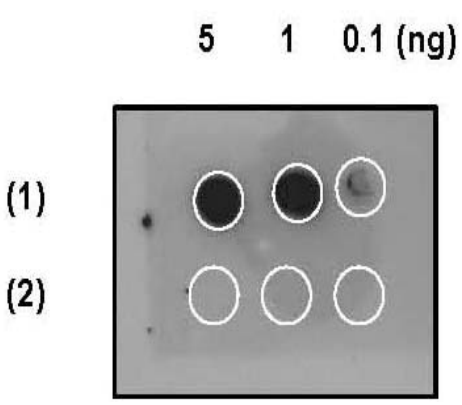


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EIF2S1 (phospho S51) antibody [E90] - BSA and Azide free (ab214434)

This IHC data was generated using the same anti-phospho EIF2S1 Serine 51 antibody clone, E90, in a different buffer formulation (cat# **ab32157**).

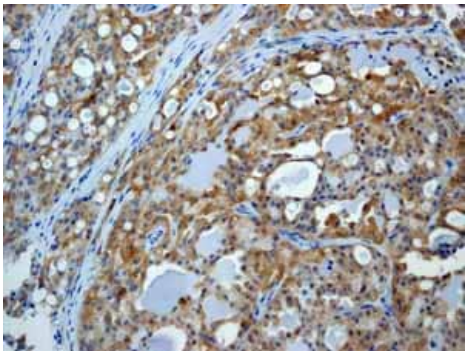
Immunohistochemical analysis of paraffin-embedded human liver carcinoma using **ab32157** at 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Dot Blot - Anti-EIF2S1 (phospho S51) antibody [E90] - BSA and Azide free (ab214434)

Dot blot analysis on antigen peptide. A nitrocellulose membrane was spotted with (1) phospho-peptide and (2) non-phospho-peptide at 5, 1, and 0.1 ng, and then blotted with **ab32157** at 1:500 dilution. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32157**).

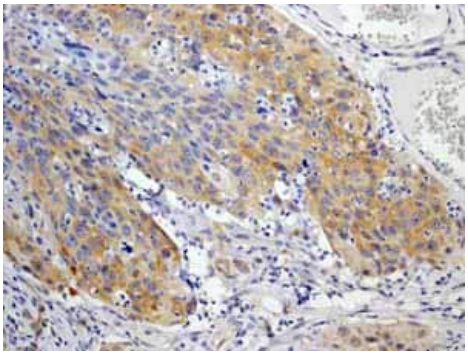


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EIF2S1 (phospho S51) antibody [E90] - BSA and Azide free (ab214434)

ab32157 showing positive staining in Breast carcinoma tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32157**).

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

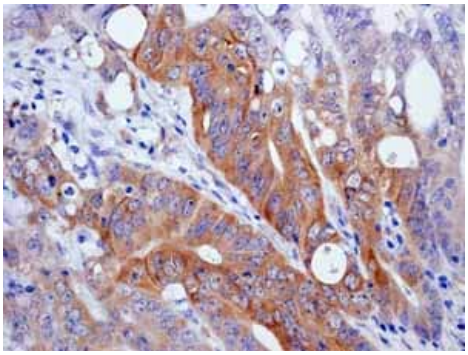


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EIF2S1 (phospho S51) antibody [E90] - BSA and Azide free (ab214434)

ab32157 showing positive staining in Cervical carcinoma tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32157**).

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

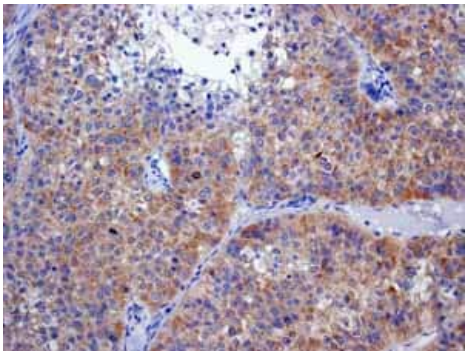


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EIF2S1 (phospho S51) antibody [E90] - BSA and Azide free (ab214434)

ab32157 showing positive staining in Colonic adenocarcinoma tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32157**).

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

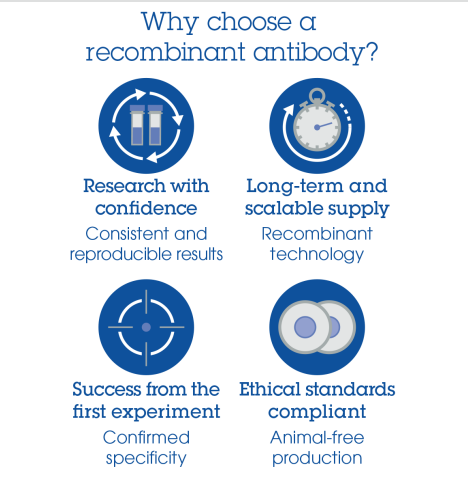


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EIF2S1 (phospho S51) antibody [E90] - BSA and Azide free (ab214434)

ab32157 showing positive staining in Hepatocellular carcinoma tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32157**).

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Anti-EIF2S1 (phospho S51) antibody [E90] - BSA and Azide free (ab214434)

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