

Anti-eIF2A antibody [EPR11042] - BSA and Azide free ab236012

KO VALIDATED

Recombinant

RabMAb

6 Images

Overview

Product name	Anti-eIF2A antibody [EPR11042] - BSA and Azide free
Description	Rabbit monoclonal [EPR11042] to eIF2A - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, WB, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC-P: Human pancreas, Human prostatic hyperplasia, Human lung cancer, Mouse cerebrum, and Rat cerebrum tissues. ICC/IF: HeLa cells, MCF7 cells.
General notes	<p>ab236012 is the carrier-free version of ab169528.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR11042
Isotype	IgG

Applications

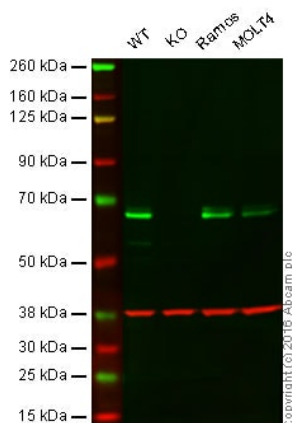
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab236012 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 65 kDa (predicted molecular weight: 65 kDa).
IHC-P		Use at an assay dependent concentration. See <u>IHC antigen retrieval protocols</u> .

Target

Function	Functions in the early steps of protein synthesis of a small number of specific mRNAs. Acts by directing the binding of methionyl-tRNAi to 40S ribosomal subunits. In contrast to the eIF-2 complex, it binds methionyl-tRNAi to 40 S subunits in a codon-dependent manner, whereas the eIF-2 complex binds methionyl-tRNAi to 40 S subunits in a GTP-dependent manner. May act by impinging the expression of specific proteins.
Tissue specificity	Widely expressed. Expressed at higher level in pancreas, heart, brain and placenta.
Sequence similarities	Belongs to the WD repeat EIF2A family. Contains 3 WD repeats.

Images



Western blot - Anti-eIF2A antibody [EPR11042] - BSA and Azide free (ab236012)

Lane 1: Wild-type HAP1 cell lysate (20 µg)

Lane 2: eIF2A knockout HAP1 cell lysate (20 µg)

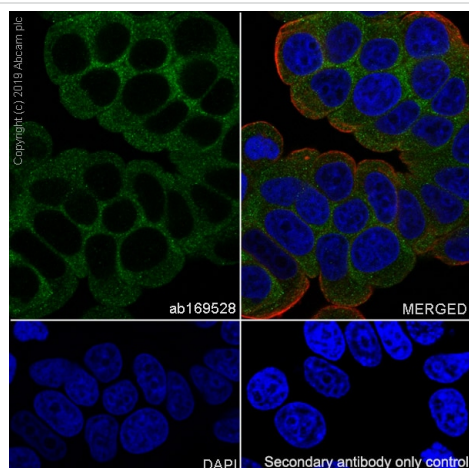
Lane 3: Ramos cell lysate (20 µg)

Lane 4: MOLT4 cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - **ab169528** observed at 65 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab169528 was shown to specifically react with eIF2A when eIF2A knockout samples were used. Wild-type and eIF2A knockout samples were subjected to SDS-PAGE. **ab169528** and **ab8245** (loading control to GAPDH) were diluted at 1/1000 and 1/10 000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1/10 000 dilution for 1 h at room temperature before imaging.

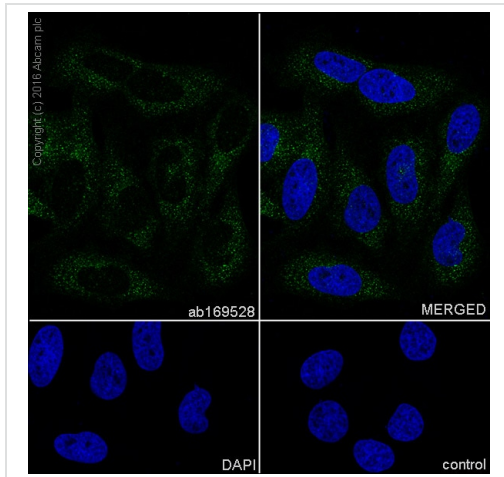
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab169528**).



Immunocytochemistry/ Immunofluorescence - Anti-eIF2A antibody [EPR11042] - BSA and Azide free (ab236012)

Immunocytochemistry/ Immunofluorescence analysis of MCF7 (Human breast adenocarcinoma epithelial cell) cells labeling eIF2A with Purified **ab169528** at 1:100 dilution (4.3 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

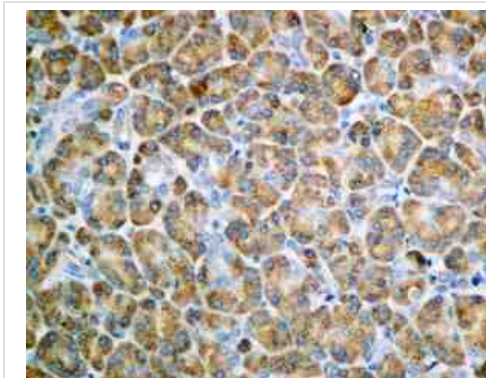
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab169528**)



Immunocytochemistry/ Immunofluorescence - Anti-eIF2A antibody [EPR11042] - BSA and Azide free (ab236012)

Immunocytochemistry/Immunofluorescence analysis of HeLa (Human epithelial cell line from cervix adenocarcinoma) labeling eIF2A with purified **ab169528** at 1/250 dilution. Cells were fixed with 4% PFA and permeabilized with 0.1% tritonX-100. **ab150077** Goat anti rabbit IgG (Alexa Fluor®488) at 1/1000 was used as the secondary antibody. Nuclei were counterstained with DAPI. PBS was used instead of the primary antibody as the negative control.

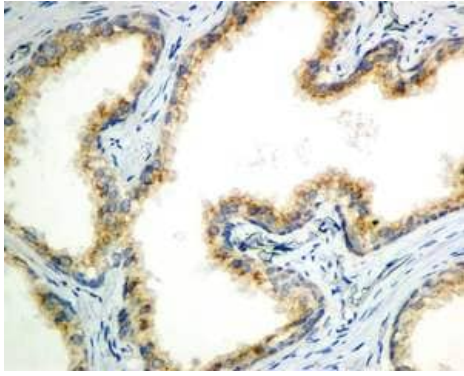
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab169528**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-eIF2A antibody [EPR11042] - BSA and Azide free (ab236012)

Immunohistochemical analysis of paraffin embedded Human pancreas tissue labeling eIF2A with unpurified **ab169528** antibody at 1/50.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab169528**).

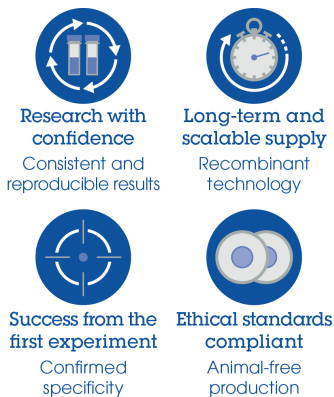


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-eIF2A antibody [EPR11042] - BSA and Azide free (ab236012)

Immunohistochemical analysis of paraffin embedded Human prostatic hyperplasia tissue labeling eIF2A with unpurified **ab169528** antibody at 1/50.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab169528**).

Why choose a recombinant antibody?



Anti-eIF2A antibody [EPR11042] - BSA and Azide free (ab236012)

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

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