abcam

Product datasheet

Anti-eIF4E antibody [Y449] - BSA and Azide free ab246346

Recombinant RabMAb

7 Images

Overview

Product name	Anti-eIF4E antibody [Y449] - BSA and Azide free
Description	Rabbit monoclonal [Y449] to eIF4E - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), WB, IHC-P, IP, ICC/IF
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HEK-293, HepG2, NIH/3T3, RAW 264.7, and C6 cell lysates; IHC-P: Human ovarian cancer tissue. Mouse and rat testis tissues; ICC/IF: RAW 264.7 cells; Flow Cyt (intra): HEK293 cells; IP: NIH/3T3 cell lysate.
General notes	ab246346 is the carrier-free version of **ab33768**. 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**.

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	Y449
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab246346 in the following tested applications.

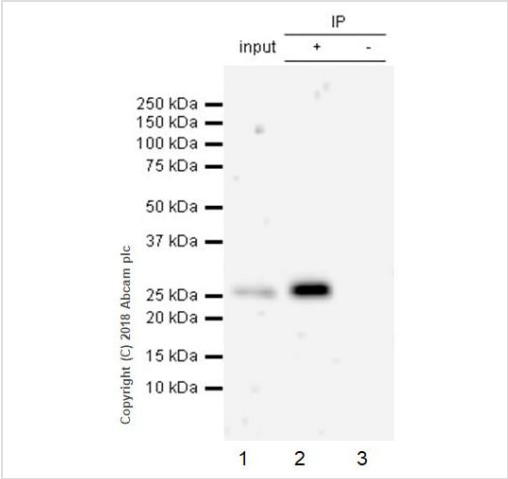
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 30 kDa (predicted molecular weight: 25 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**.
IP		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.

Target

Function	Its translation stimulation activity is repressed by binding to the complex CYFIP1-FMR1 (By similarity). Recognizes and binds the 7-methylguanosine-containing mRNA cap during an early step in the initiation of protein synthesis and facilitates ribosome binding by inducing the unwinding of the mRNAs secondary structures. Component of the CYFIP1-EIF4E-FMR1 complex which binds to the mRNA cap and mediates translational repression. In the CYFIP1-EIF4E-FMR1 complex this subunit mediates the binding to the mRNA cap.
Sequence similarities	Belongs to the eukaryotic initiation factor 4E family.
Post-translational modifications	Phosphorylation increases the ability of the protein to bind to mRNA caps and to form the eIF4F complex.

Images



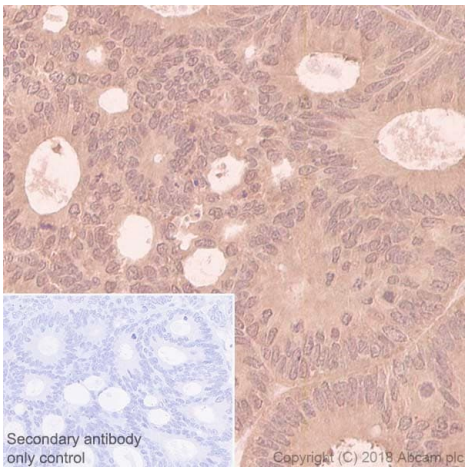
Immunoprecipitation - Anti-eIF4E antibody [Y449] - BSA and Azide free (ab246346)

eIF4E was immunoprecipitated from 10 µg NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate with **ab33768** at a 1/30 dilution. Western blot was performed from the immunoprecipitate using **ab33768** at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/1000 dilution.

Lane 1: NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate 10 µg (Input).
Lane 2: **ab33768** IP in NIH/3T3 whole cell lysate.
Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab33768** in NIH/3T3 whole cell lysate.

Blocking/Dilution buffer: 5% NFDM/TBST.

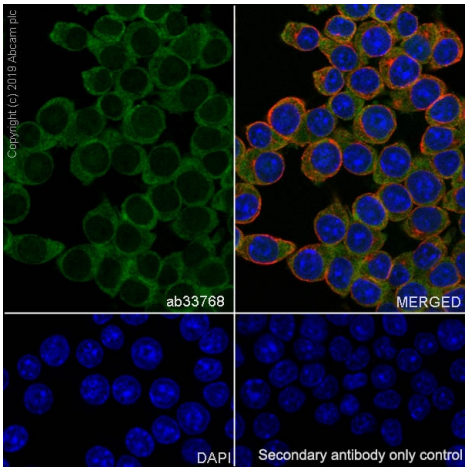
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab33768**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-eIF4E antibody [Y449] - BSA and Azide free (ab246346)

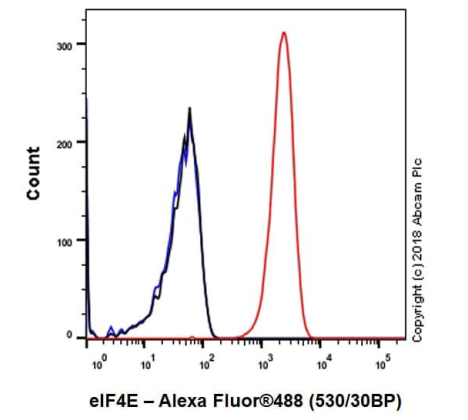
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human ovarian cancer tissue labelling eIF4E with **ab33768** at a dilution of 1/500. Antigen retrieval was performed **ab93684**, Tris/EDTA buffer, pH 9. A ready to use goat anti-rabbit IgG H&L (HRP Polymer) was used as the secondary antibody. Counter stained with Hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab33768**).



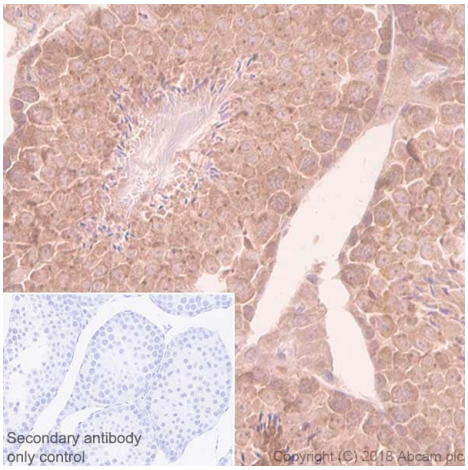
Immunocytochemistry/ Immunofluorescence - Anti-eIF4E antibody [Y449] - BSA and Azide free (ab246346)

Immunocytochemistry/ Immunofluorescence analysis of RAW 264.7 (Mouse Abelson murine leukemia virus-induced tumor macrophage) cells labeling eIF4E with Purified **ab33768** at 1/50 (10 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 (**ab33768**).



Flow Cytometry (Intracellular) - Anti-eIF4E antibody [Y449] - BSA and Azide free (ab246346)

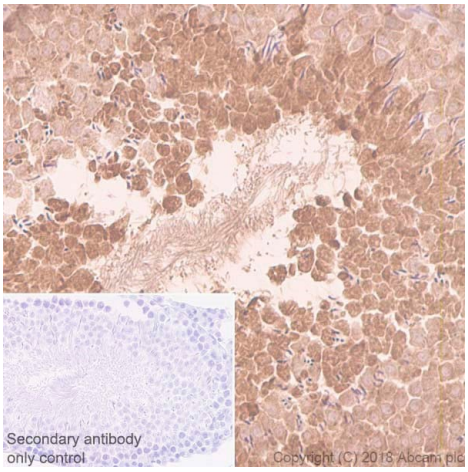
Intracellular Flow Cytometry analysis of HEK-293 (Human embryonickidney epithelial cell) cells labeling eIF4E with Purified **ab33768** at 1/50 dilution (10 µg/mL) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue). This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab33768**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-eIF4E antibody [Y449] - BSA and Azide free (ab246346)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse testis tissue labelling eIF4E with **ab33768** at a dilution of 1/500. Antigen retrieval was performed **ab93684**, Tris/EDTA buffer, pH 9. A ready to use goat anti-rabbit IgG H&L (HRP Polymer) was used as the secondary antibody. Counter stained with Hematoxylin.

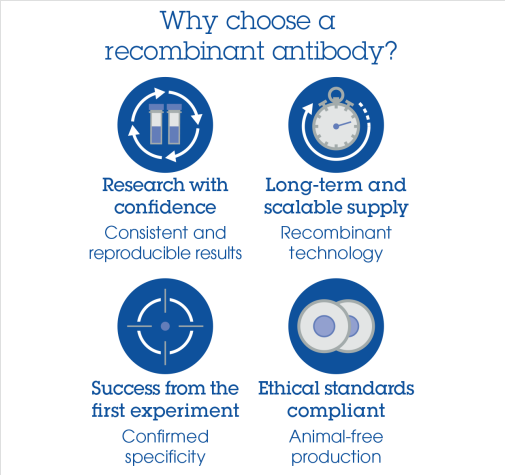
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab33768**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-eIF4E antibody [Y449] - BSA and Azide free (ab246346)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat testis tissue labelling eIF4E with **ab33768** at a dilution of 1/500. Antigen retrieval was performed **ab93684**, Tris/EDTA buffer, pH 9. A ready to use goat anti-rabbit IgG H&L (HRP Polymer) was used as the secondary antibody. Counter stained with Hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab33768**).



Anti-eIF4E antibody [Y449] - BSA and Azide free

(ab246346)

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