

Product datasheet

Anti-eIF2A antibody [EPR11041] ab157478

KO VALIDATED Recombinant RabMAb

5 Images

Overview

Product name	Anti-eIF2A antibody [EPR11041]
Description	Rabbit monoclonal [EPR11041] to eIF2A
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF Unsuitable for: Flow Cyt, IHC-P or IP
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human eIF2A. The exact sequence is proprietary.
Positive control	Ramos, MOLT4, U87-MG and Raji cell lysates; Raji cells. ICC/IF: HAP1 wildtype and HAP1-eIF2A knockout cells.
General notes	<p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</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> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise[™] guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been "predicted to work</p>

with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

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, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPR11041
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab157478** 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
WB		1/1000 - 1/5000. Predicted molecular weight: 65 kDa.
ICC/IF		Use a concentration of 1 µg/ml.

Application notes Is unsuitable for Flow Cyt, IHC-P or IP.

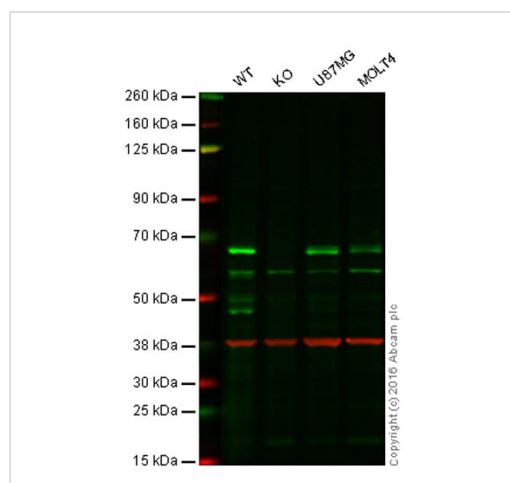
Target

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 [EPR11041] (ab157478)

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

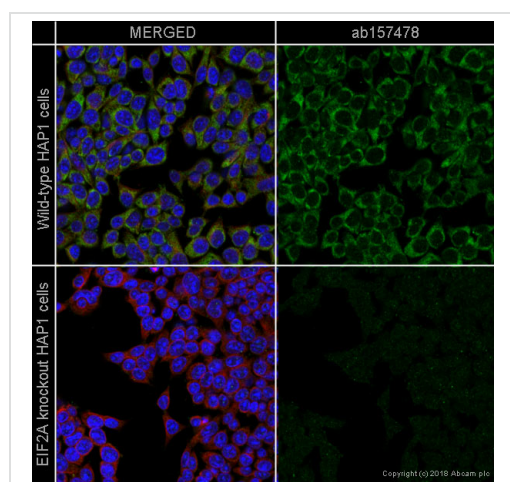
Lane 2: eIF2A knockout HAP1 cell lysate (20 µg)

Lane 3: U87-MG cell lysate (20 µg)

Lane 4: MOLT4 cell lysate (20 µg)

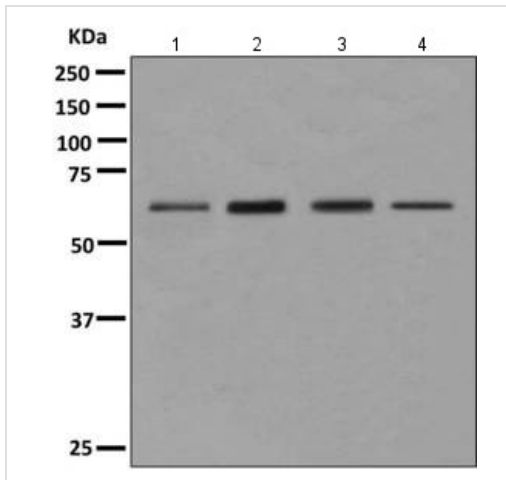
Lanes 1 - 4: Merged signal (red and green). Green - ab157478 observed at 65 kDa. Red - loading control, ab8245, observed at 37 kDa.

ab157478 was shown to recognize eIF2A when eIF2A knockout samples were used, along with additional cross-reactive bands. Wild-type and eIF2A knockout samples were subjected to SDS-PAGE. ab157478 and ab8245 (loading control to GAPDH) were diluted at 1/500 and 1/10000 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 1/10000 dilution for 1 h at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-eIF2A antibody [EPR11041] (ab157478)

ab157478 staining eIF2A in wild-type HAP1 cells (top panel) and EIF2A knockout HAP1 cells (bottom panel). The cells were fixed with 100% methanol for 5 minutes, permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1 hour. The cells were then incubated with ab157478 at 1 µg/ml and ab195889 at 1/250 dilution (shown in pseudo colour red) overnight at +4°C, followed by a further incubation at room temperature for 1 hour with Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed (ab150081) secondary antibody at 2 µg/ml (shown in green). Nuclear DNA was labelled in blue with DAPI.



Western blot - Anti-eIF2A antibody [EPR11041] (ab157478)

All lanes : Anti-eIF2A antibody [EPR11041] (ab157478) at 1/1000 dilution

Lane 1 : Ramos cell lysate

Lane 2 : MOLT4 cell lysate

Lane 3 : U87-MG cell lysate

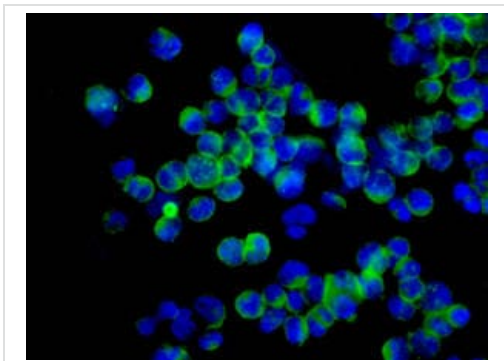
Lane 4 : Raji cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 65 kDa



Immunocytochemistry/ Immunofluorescence - Anti-eIF2A antibody [EPR11041] (ab157478)

Immunofluorescent analysis of Raji cells labeling eIF2A with ab157478 at 1/100 dilution.

Why choose a recombinant antibody?

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

Anti-eIF2A antibody [EPR11041] (ab157478)

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

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