

Product datasheet

Anti-EEF2/Elongation factor 2 antibody [EP880Y] ab75748

Recombinant RabMAb

[6 References](#) [11 Images](#)

Overview

Product name	Anti-EEF2/Elongation factor 2 antibody [EP880Y]
Description	Rabbit monoclonal [EP880Y] to EEF2/Elongation factor 2
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IP, IHC-P, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide within Human EEF2/Elongation factor 2 (C terminal). The exact sequence is proprietary.
Positive control	A431, NIH3T3, HeLa, C6, PC-12 and NIH/3T3 cell lysates. Kidney carcinoma tissue, rat pancreas, mouse pancreas, human glioma.
General notes	<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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.1% BSA
Purity	Protein A purified
Clonality	Monoclonal

Clone number EP880Y
Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab75748 in the following tested applications.

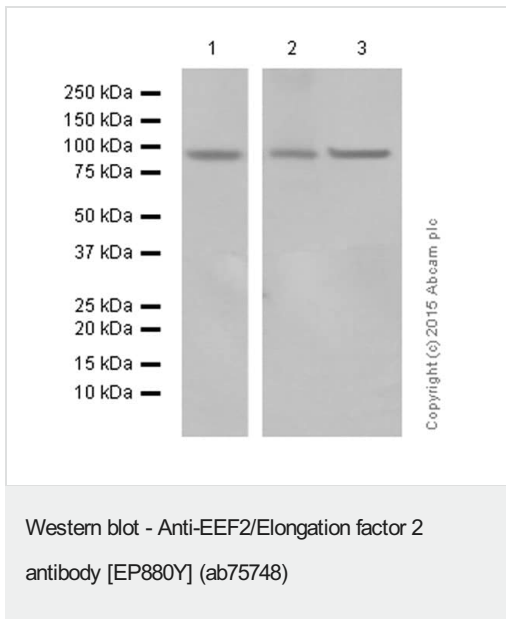
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/70. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/10000 - 1/50000. Detects a band of approximately 95 kDa (predicted molecular weight: 95 kDa).
IP		1/20.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		1/100 - 1/250.

Target

Function	Catalyzes the GTP-dependent ribosomal translocation step during translation elongation. During this step, the ribosome changes from the pre-translocational (PRE) to the post-translocational (POST) state as the newly formed A-site-bound peptidyl-tRNA and P-site-bound deacylated tRNA move to the P and E sites, respectively. Catalyzes the coordinated movement of the two tRNA molecules, the mRNA and conformational changes in the ribosome.
Sequence similarities	Belongs to the GTP-binding elongation factor family. EF-G/EF-2 subfamily.
Post-translational modifications	Phosphorylation by EF-2 kinase completely inactivates EF-2. Diphthamide is 2-[3-carboxyamido-3-(trimethyl-ammonio)propyl]histidine. Diphthamide can be ADP-ribosylated by diphtheria toxin and by Pseudomonas exotoxin A, thus arresting protein synthesis. ISGylated.
Cellular localization	Cytoplasm.

Images



All lanes : Anti-EEF2/Elongation factor 2 antibody [EP880Y] (ab75748) at 1/50000 dilution

Lane 1 : C6 (rat glioma) whole cell lysates

Lane 2 : PC-12 (rat adrenal gland pheochromocytoma) whole cell lysates

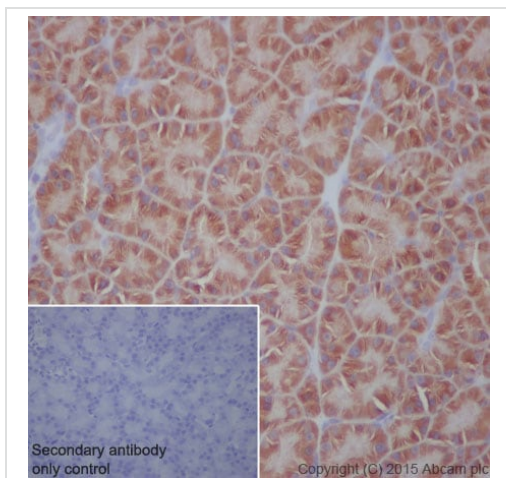
Lane 3 : NIH/3T3 (mouse embryo) whole cell lysates

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Rabbit monoclonal [EP880Y] to EEF2/Elongation factor 2 (ab75748) at 1/100000 dilution

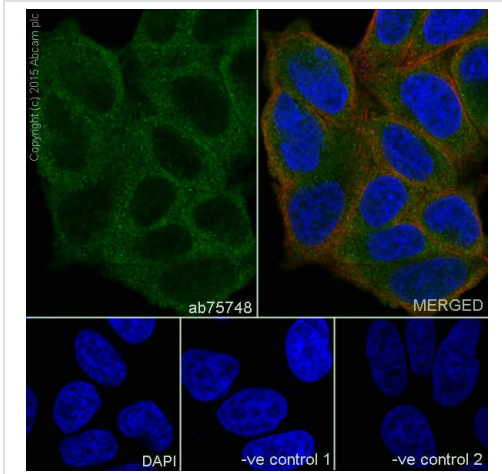
Predicted band size: 95 kDa



ab75748 staining EEF2/Elongation factor 2 in rat pancreas tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/700. A goat anti-rabbit IgG H&L (HRP) **ab97051** was used as the secondary antibody at a dilution of 1/500.

Negative control 1: PBS in place of primary antibody.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EEF2/Elongation factor 2 antibody [EP880Y] (ab75748)

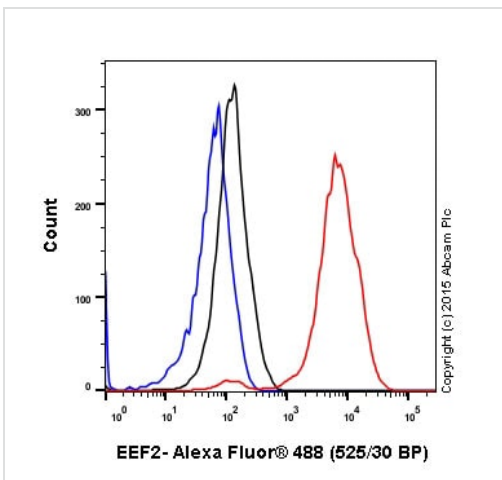


Immunocytochemistry/ Immunofluorescence - Anti-EEF2/Elongation factor 2 antibody [EP880Y] (ab75748)

ab75748 staining EEF2/Elongation factor 2 in HeLa (human cervix adenocarcinoma) cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with 4% Paraformaldehyde and permeabilized with 0.1% Triton X-100. Samples were incubated with primary antibody at a dilution of 1/100. A goat anti rabbit IgG (Alexa Fluor® 488) (**ab150077**) was used as the secondary antibody. **ab7291** and **ab150120** were used as counterstains for primary antibody ab75748 and secondary antibody **ab150077** respectively and DAPI was used as a nuclear counterstain.

Negative control 1: Rabbit primary antibody and anti-mouse secondary antibody (**ab150120**)

Negative control 2: Mouse primary antibody (**ab7291**) and anti-rabbit secondary antibody (**ab150077**)

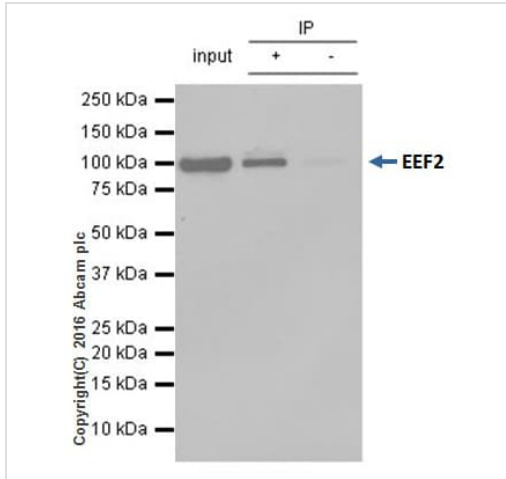


Flow Cytometry (Intracellular) - Anti-EEF2/Elongation factor 2 antibody [EP880Y] (ab75748)

ab75748 staining EEF2/Elongation factor 2 in the human cell line HEK293 (human embryonic kidney) by intracellular flow cytometry. Cells were fixed with 4% paraformaldehyde and the sample was incubated with the primary antibody at a dilution of 1/70. A goat anti rabbit IgG (Alexa Fluor® 488) at a dilution of 1/500 was used as the secondary antibody.

Isotype control: Rabbit monoclonal IgG (Black)

Unlabelled control: Cell without incubation with primary antibody and secondary antibody (Blue)



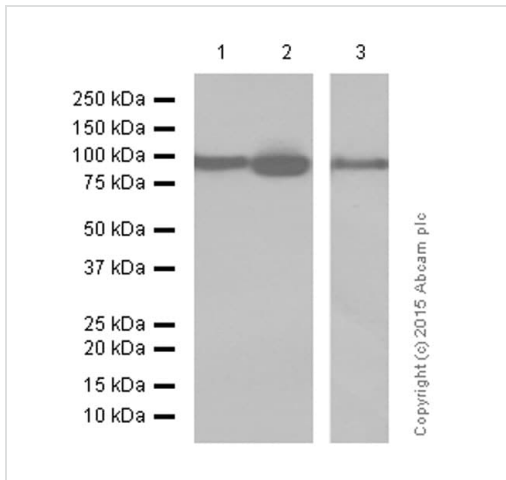
Immunoprecipitation - Anti-EEF2/Elongation factor 2 antibody [EP880Y] (ab75748)

ab75748 immunoprecipitating EEF2/Elongation factor 2. 10µg of cell lysate was incubated with primary antibody at a dilution of 1/20 and VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) at a dilution of 1/10000.

Lane 1: HeLa (human cervix adenocarcinoma) whole cell lysate (10µg)

Lane 2: HeLa (human cervix adenocarcinoma) whole cell lysate

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab75748 in HeLa (human cervix adenocarcinoma) whole cell lysate



Western blot - Anti-EEF2/Elongation factor 2 antibody [EP880Y] (ab75748)

All lanes : Anti-EEF2/Elongation factor 2 antibody [EP880Y] (ab75748) at 1/50000 dilution

Lane 1 : HEK293 (human embryonic kidney) whole cell lysates

Lane 2 : HeLa (human cervix adenocarcinoma) whole cell lysates

Lane 3 : A431 (human epidermoid carcinoma) whole cell lysates

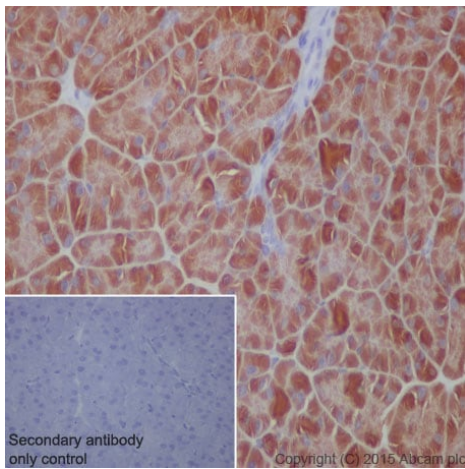
Lysates/proteins at 20 µg per lane.

Secondary

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

Predicted band size: 95 kDa

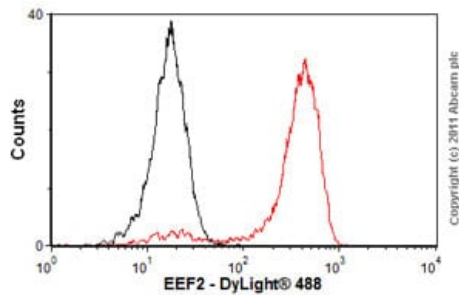
Additional bands at: 95 kDa. We are unsure as to the identity of these extra bands.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EEF2/Elongation factor 2 antibody [EP880Y] (ab75748)

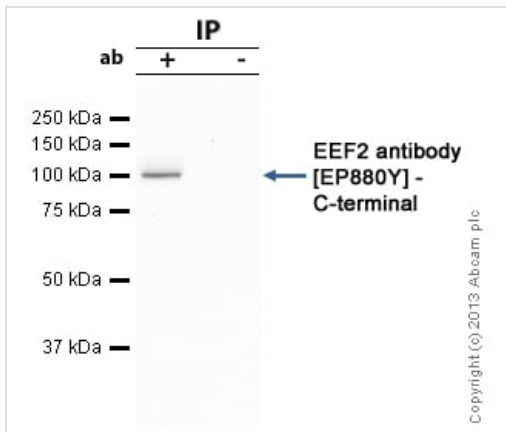
ab75748 staining EEF2/Elongation factor 2 in mouse pancreas tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/250. A goat anti-rabbit IgG H&L (HRP) **ab97051** was used as the secondary antibody.

Negative control 1: PBS in place of primary antibody.



Flow Cytometry (Intracellular) - Anti-EEF2/Elongation factor 2 antibody [EP880Y] (ab75748)

Overlay histogram showing HeLa cells stained with ab75748 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab75748, 1µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit IgG (H+L) (**ab96899**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed.



Immunoprecipitation - Anti-EEF2/Elongation factor 2 antibody [EP880Y] (ab75748)

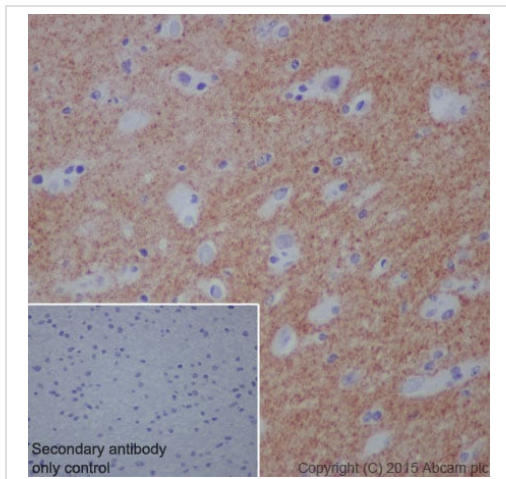
EEF2/Elongation factor 2 was immunoprecipitated using 0.5mg Hela whole cell extract, 5µg of Rabbit monoclonal to EEF2/Elongation factor 2 and 50µl of protein G magnetic beads (+). No antibody was added to the control (-).

The antibody was incubated under agitation with Protein G beads for 10min, Hela whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70°C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab75748.

Secondary: Mouse monoclonal [SB62a] Secondary Antibody to Rabbit IgG light chain (HRP) ([ab99697](#)).

Band: 95kDa; EEF2/Elongation factor 2



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EEF2/Elongation factor 2 antibody [EP880Y] (ab75748)

ab75748 staining EEF2/Elongation factor 2 in human glioma tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/250. A goat anti-rabbit IgG H&L (HRP) ([ab97051](#)) was used as the secondary antibody.

Negative control 1: PBS in place of primary antibody.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-EEF2/Elongation factor 2 antibody [EP880Y]
(ab75748)

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

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