# abcam

# Product datasheet

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



重组 RabMAb

11 图像 **6 References** 

概述

产品名称 Anti-EEF2/Elongation factor 2抗体[EP880Y]

描述 兔单克隆抗体[EP880Y] to EEF2/Elongation factor 2

宿主 Rabbit

经测试应用 适用于: Flow Cyt (Intra), WB, IP, IHC-P, ICC/IF

种属反应性 与反应: Mouse, Rat, Human

免疫原 Synthetic peptide within Human EEF2/Elongation factor 2 (C terminal). The exact sequence is

proprietary.

阳性对照 A431, NIH3T3, HeLa, C6, PC-12 and NIH/3T3 cell lysates. Kidney carcinoma tissue, rat

pancreas, mouse pancreas, human glioma.

常规说明 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

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

存储溶液 pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.1% BSA

纯度 Protein A purified

克隆 单克隆 EP880Y 克隆编号

同种型 lgG

### 应用

### The Abpromise guarantee Abpromise™承诺保证使用ab75748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
Flow Cyt (Intra)		1/70. <b>ab172730</b> - Rabbit monoclonal lgG, 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.

#### 靶标

功能

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.

序列相似性 Belongs to the GTP-binding elongation factor family. EF-G/EF-2 subfamily.

翻译后修饰 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.

细胞定位 Cytoplasm.

#### 图片



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: C6 (rat glioma) whole cell lysates

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

lysates

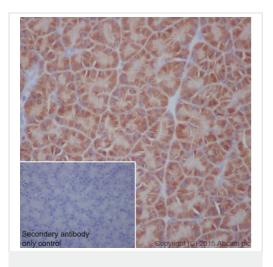
Lane 3: NIH/3T3 (mouse embryo) whole cell lysates

Lysates/proteins at 20 µg per lane.

# **Secondary**

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

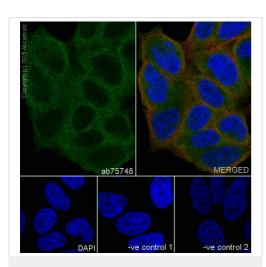
Predicted band size: 95 kDa



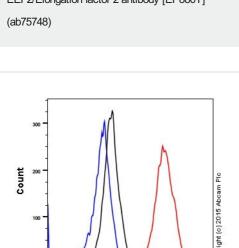
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-EEF2/Elongation factor 2 antibody [EP880Y] (ab75748)

ab75748 staining EEF2/Elongation factor 2 in rat pancreas tissue sections by Immunohistochemistry (IHC-P - paraformaldehydefixed, 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.



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



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

EEF2- Alexa Fluor® 488 (525/30 BP)

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.

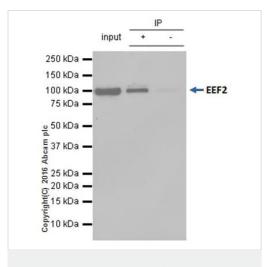
**Negative control 1**: Rabbit primary antibody and anti-mouse secondary antibody (**ab150120**)

**Negative control 2:** Mouse primary antibody (<u>ab7291</u>) and antirabbit secondary antibody (<u>ab150077</u>)

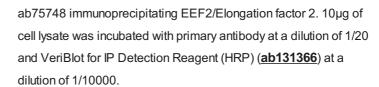
ab75748 stainingEEF2/Elongation factor 2 in the human cell line HEK293 (human embryonic kidney) by intracellular flow cytometry. Cells were fixed with 4% paraformaldehyde and the sample was incubated with the primary antibody at a dilution of 1/70. A goat anti rabbit lgG (Alexa Fluor<sup>®</sup> 488) at a dilution of 1/500 was used as the secondary antibody.

Isoytype 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)



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

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

Lane 3: Rabbit monoclonal lgG (<u>ab172730</u>) 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

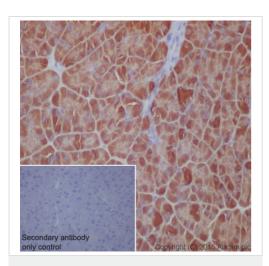
Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

Predicted band size: 95 kDa

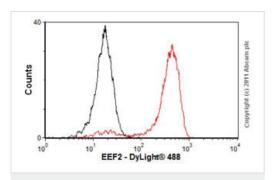
**Additional bands at:** 95 kDa. We are unsure as to the identity of these extra bands.



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

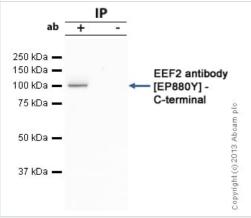
ab75748 staining EEF2/Elongation factor 2 in mouse pancreas tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody 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/1x10 $^6$  cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit lgG (H+L) (ab96899) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit lgG (monoclonal) (1µg/1x10 $^6$  cells) used under the same conditions. Acquisition of >5,000 events was performed.



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

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - 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.

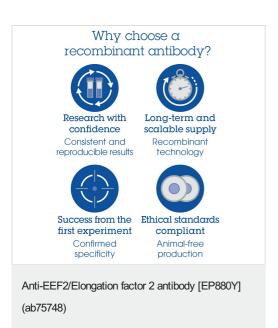
Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70°C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab75748.

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

Band: 95kDa; EEF2/Elongation factor 2

ab75748 staining EEF2/Elongation factor 2 in human glioma tissue sections by Immunohistochemistry (IHC-P - paraformaldehydefixed, 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.



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

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- · Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.cn/abpromise">https://www.abcam.cn/abpromise</a> or contact our technical team.

#### Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors