

Datasheet: AHP993

BATCH NUMBER 149262

Description:	RABBIT ANTI 4EBP1 (C-TERMINAL)
Specificity:	4EBP1 (C-TERMINAL)
Other names:	eIF-4EBP1
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	0.1 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting	▪			2.5 - 5.0ug/ml

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species

Human

Species Cross Reactivity

Reacts with: Mouse

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG - liquid

Preparation

Antisera to human 4EBP1 (CT) were raised by repeated immunisation of rabbits with highly purified antigen.

Purified IgG prepared by affinity chromatography.

Buffer Solution Phosphate buffered saline

Preservative Stabilisers 0.02% Sodium Azide (NaN₃)

Approx. Protein Concentrations IgG concentration 1.0mg/ml

Immunogen A 14 amino acid peptide located near human 4EBP1 carboxy-terminus.

External Database Links

UniProt:

[Q13541](#)

[Related reagents](#)

Entrez Gene:

[1978](#)

EIF4EBP1

[Related reagents](#)

RRID AB_2097985

Specificity

Rabbit anti 4EBP1 antibody recognizes an epitope within the C-terminal region (CT) of eukaryotic translation initiation factor 4E binding protein 1 (4EBP1), a rapamycin-sensitive downstream target of TOR (Target of rapamycin), and regulatory factor of eukaryotic mRNA translation.

The association between 4EBP1 and eukaryotic translation initiation factor 4E (eIF-4E) inhibits the binding of eIF-4E with p220, thereby preventing the formation of a functional eIF-4E complex, essential for mRNA translation. Phosphorylation of 4EBP1 following stimulation by mitogens such as insulin, results in the release of eIF-4E from 4EBP1, thereby enabling the translation complex to assemble.

Rabbit anti 4EBP1 antibody (AHP993) has been reported as suitable for use in IHC on mouse 3T3 cell cytopins.

Western Blotting AHP993 detects a band of approximately 20kDa in mouse 3T3 cell lysates. (predicted Mwt. 13kDa).

Further Reading

1. Hara, K. *et al.* (1997) Regulation of eIF-4E BP1 phosphorylation by mTOR. [J Biol Chem. 272 \(42\): 26457-63.](#)
 2. Haghghat, A. *et al.* (1995) Repression of cap-dependent translation by 4E-binding protein 1: competition with p220 for binding to eukaryotic initiation factor-4E. [EMBO J. 14 \(22\): 5701-9.](#)
-

Storage

Store at +4°C or at -20°C if preferred.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee	12 months from date of despatch
------------------	---------------------------------

Health And Safety Information	Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
--------------------------------------	--

Regulatory	For research purposes only
-------------------	----------------------------

Related Products

Recommended Secondary Antibodies

- Sheep Anti Rabbit IgG (STAR34...) [FITC](#)
Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)
Sheep Anti Rabbit IgG (STAR35...) [RPE](#)
Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)

Recommended Useful Reagents

[TidyBlot WESTERN BLOT DETECTION REAGENT:HRP \(STAR209P\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
----------------------------------	---	------------------	---	---------------	---

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M364408:200529'

Printed on 08 Feb 2023