

Datasheet: AHP993

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	Reacts with: Mouse			
Reactivity	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 (NaN ₃)
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 4EPB1 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 cytospins.
Western Blotting	AHP993 detects a band of approximately 20kDa in mouse 3T3 cell lysates. (predicted Mwt. 13kDa).
Further Reading	 Hara, K. et al. (1997) Regulation of eIF-4E BP1 phosphorylation by mTOR. J Biol Chem. 272 (42): 26457-63. Haghighat, 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	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.
	Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

 Guarantee
 12 months from date of despatch

 Health And Safety Information
 Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/AHP993 10040

 Regulatory
 For research purposes only

Related Products

Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...) FITC
Sheep Anti Rabbit IgG (STAR35...) RPE

Goat Anti Rabbit IgG (Fc) (STAR121...) Biotin, FITC, HRP

Sheep Anti Rabbit IgG (STAR36...) <u>DyLight®488</u>, <u>DyLight®680</u>, <u>DyLight®800</u>

Goat Anti Rabbit IgG (H/L) (STAR124...) HRP

Recommended Useful Reagents

TidyBlot WESTERN BLOT DETECTION REAGENT:HRP (STAR209P)

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M386265:210519'

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