

Datasheet: AHP2554

Description:	RABBIT ANTI ATF2 (pThr55/pThr73)
Specificity:	ATF2 (pThr55/pThr73)
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	50 µl

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.biorad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Western Blotting	•			1/500 - 1/2000

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	Based on sequence similarity, is expected to react

Reactivity

ct with:Mouse, Rat

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	
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Antiserum Preparation Antiserum to ATF2 (pThr55/pThr73) was raised by repeated immunization of rabbits with

highly purified antigen. Purified IgG was prepared from whole serum by affinity

chromatography.

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.02% Sodium Azide 50% Glycerol
Immunogen	Phospho specific-peptide corresponding to residues surrounding threonine 55/threonine

External	Database
Links	

UniProt:

P15336 Related reagents

Entrez Gene:

1386 ATF2 Related reagents

Synonyms

CREB2, CREBP1

Specificity

Rabbit anti ATF2 (pThr55/pThr73) antibody recognizes activating transcription factor 2 (ATF2), also known as cyclic AMP-dependent transcription factor ATF-2 and cyclic AMP-responsive element-binding protein 2 (CREB-2), when phosphorylated at threonine 55 or threonine 73. ATF2 is a member of the ATF family of transcription factors containing single bZIP and C2H2-type zinc finger domains. ATF2 plays a role in the regulation of genes involved in cell differentiation, growth and the response to stress and DNA damage.

ATF2 binds to the cAMP responsive element (CRE), leading to CRE-dependent transcription (Shuman et al. 1997). ATF2 also functions as a histone acetyltransferase (HAT), specifically acetylating histones 2B and 4 in vitro (Kawasaki et al. 2000).

It is reported that ATF2 is phosphorylated on threonine 73 by vaccinia-related kinase-1 (VRK1), activating the transcriptional activity of ATF2 (<u>Sevilla et al. 2004</u>).

References

- 1. Shuman, J.D. *et al.* (1997) ATF-2 and C/EBPalpha can form a heterodimeric DNA binding complex in vitro. Functional implications for transcriptional regulation. <u>J Biol Chem.</u> 272 (19): 12793-800.
- 2. Kawasaki, H. *et al.* (2000) ATF-2 has intrinsic histone acetyltransferase activity which is modulated by phosphorylation. Nature. 405 (6783): 195-200.
- 3. Sevilla, A. *et al.* (2004) Human vaccinia-related kinase 1 (VRK1) activates the ATF2 transcriptional activity by novel phosphorylation on Thr-73 and Ser-62 and cooperates with JNK. <u>J Biol Chem. 279 (26): 27458-65.</u>

Storage

Store at -20°C

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 #10049 available at: 10049: https://www.bio-rad-antibodies.com/uploads/MSDS/10049.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

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

Sheep Anti Rabbit IgG (STAR35...) RPE

Sheep Anti Rabbit IgG (STAR36...) DyLight®488, DyLight®680, DyLight®800

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 'M336235:181214'

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