

Datasheet: AHP1266

Description:	RABBIT ANTI Chk2 (pThr68)
Specificity:	Chk2 (pThr68)
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	50 µg

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			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			1/10000 - 1/50000
Immunoprecipitation			▪	
Western Blotting (1)	▪			1/200 - 1/2000
Functional Assays			▪	

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.

(1)For the detection of phosphoproteins, tyrosine phosphatase inhibitors such as 1mM Sodium Orthovanadate should be added to the sample buffer. Milk or other casein-based blocking solutions are not recommended as casein is a phosphoprotein and its use can result in high background.

Target Species	Human
Species Cross Reactivity	Based on sequence similarity, is expected to react with: Mouse, Chimpanzee, Rat N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG - liquid
Antiserum Preparation	Antisera to Chk2 (pTHR68) were raised by repeated immunisations of rabbits with highly purified antigen. Purified IgG prepared by affinity chromatography.
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.01% Sodium Azide (NaN ₃)
Approx. Protein	IgG concentration 1.0mg/ml

Concentrations

Immunogen Synthetic peptide corresponding to amino acids 64-73 of human Chk2 phosphorylated at Thr68.

External Database Links

UniProt:

[O96017](#) [Related reagents](#)

Entrez Gene:

[11200](#) CHEK2 [Related reagents](#)

Synonyms CHK2, RAD53

Specificity

Rabbit anti Chk2 (pThr68) antibody recognizes Chk2, also known as serine/threonine-protein kinase Chk2, CHK2 checkpoint homolog, Cds1 homolog (hCds1) and checkpoint kinase 2, when phosphorylated at threonine 68. Chk2 is a serine/threonine-protein kinase which functions as a cell cycle checkpoint regulator. ATM and ATR kinases are activated in response to ionizing and ultraviolet radiation, and phosphorylate threonine 68 and other sites in the amino-terminal region of Chk2, leading to Chk2 dimerisation and activation.

Activated Chk2 phosphorylates and inhibits Cdc25C phosphatase, preventing the entry into mitosis, and has been shown to stabilize the tumor suppressor protein p53, leading to cell cycle arrest in G1. In addition, Chk2 can phosphorylate BRCA1, allowing BRCA1 to restore survival after DNA damage.

Chk2 is a putative tumor suppressor protein, with mutations in to the Chk2 gene linked to Li-Fraumeni syndrome, a familial cancer usually associated with inherited mutations in TP53.

Western Blotting AHP1266 detects a band of approximately 61kDa.

Further Reading

1. Bartek, J. & Lukas, J. (2003) Chk1 and Chk2 kinases in checkpoint control and cancer. [Cancer Cell. 3 \(5\): 421-9.](#)
 2. Ahn, J. *et al.* (2004) The Chk2 protein kinase. [DNA Repair \(Amst\). 3 \(8-9\): 1039-47.](#)
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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.

Shelf Life 18 months from date of despatch.

Health And Safety Information

Material Safety Datasheet documentation available at:
Material Safety Datasheet Documentation #10040 available at:
<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](#)

Sheep Anti Rabbit IgG (STAR35...) [RPE](#)
Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)
Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)
Sheep Anti Rabbit IgG (2AB02...) [Biotin](#)
Sheep Anti Rabbit IgG (STAR36...) [DyLight®488](#), [DyLight®549](#), [DyLight®649](#),
[DyLight®680](#), [DyLight®800](#)

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'M313648:180328'

Printed on 13 Apr 2018

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