

Datasheet: AHP2270 BATCH NUMBER 162353

Description:	RABBIT ANTI p62 (pThr269/pSer272)
Specificity:	p62 (pThr269/pSer272)
Other names:	SQSTM1
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	0.1 ml

Product Details

Applications

Preservative

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
Western Blotting	•			1/1000

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.

Human
Based on sequence similarity, is expected to react with:Primate 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.
Purified IgG - liquid
Antiserum to p62 (pThr269/pSer272) was raised by repeated immunisations of rabbits with highly purified antigen. Purified IgG was prepared by affinity purification via sequentia chromatography on phospho- and dephospho-peptide affinity columns
HEPES buffered saline

0.09% Sodium Azide (NaN₃)

Stabilisers

1% Bovine Serum Albumin

50% Glycerol

Immunogen

Phosphopeptide corresponding to amino acid residues surrounding the phospho-Thr269/Ser272 region of human p62

External Database Links

UniProt:

Q13501 Related reagents

Entrez Gene:

8878 SQSTM1 Related reagents

Synonyms

ORCA, OSIL

Specificity

Rabbit anti p62 (pThr269/pSer272) antibody recognizes ubiquitin-binding protein p62, also known as sequestosome-1 and EBI3-associated protein of 60 kDa (EBIAP), when phosphorylated at threonine 269 and serine 272. p62 is important in regulating critical cellular functions, including bone homeostasis, obesity, and cancer via its interactions with various signaling intermediaries. The SQSTM1 gene encodes a multifunctional protein that binds ubiquitin and regulates activation of the nuclear factor kappa-B (NF-κB) signaling pathway. p62 functions as a scaffolding/adaptor protein in concert with TNF receptorassociated factor 6 to mediate activation of NF-κB in response to upstream signals.

p62 plays an important role in bone remodeling, regulating this process through its role in a chemical signaling pathway that promotes the formation of osteoclasts. p62 may be involved autophagy (<u>Zhang et al. 2016</u>), the self-destruction of cells (apoptosis), and the body's immune responses and inflammatory reactions.

p62 is an integral component of inclusions in brains of various neurodegenerative disorders, including Alzheimer disease (AD) neurofibrillary tangles (NFTs) and Lewy bodies in Parkinson disease (Kurosawa et al. 2016). p62 plays an important role in the protection of cells from the toxicity of misfolded proteins by enhancing aggregate formation especially in the later stages(Wang et al. 2014).

p62 is overexpressed in many human cancers and is induced during cell transformation. cdk1 phosphorylates p62 *in vitro* and *in vivo* at T269 and S272, which is necessary for the maintenance of appropriate cyclin B1 levels and the levels of cdk1 activity necessary to allow cells to properly enter and exit mitosis (<u>Linares et al. 2011</u>). The lack of cdk1-mediated phosphorylation of p62 leads to a faster exit from mitosis, translating into enhanced cell proliferation and tumorigenesis in response to Ras-induced transformation.

Western Blotting

Rabbit anti Human p62 (pThr269/pSer272) detects a band of approximately 62 kDa in Jurkat cell lysate

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 #10088 available at: https://www.bio-rad-antibodies.com/SDS/AHP2270 10088
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...) DyLight®680, DyLight@4888, DyLight@48888, DyLight@488888, DyLight@48888888, <

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

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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 'M386236:210519'

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