Datasheet: AHP963

BATCH NUMBER 161012

Description:	RABBIT ANTI HUMAN CASPASE-1 (C-TERMINAL)
Specificity:	CASPASE-1 (C-TERMINAL)
Other names:	IL-1 BETA CONVERTING ENZYME
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			▪	
Immunohistology - Paraffin (1)	▪			2.0ug/ml
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting	▪			0.5ug - 1.0ug/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.

(1)**This product does not require protein digestion pre-treatment of paraffin embedded sections e.g. trypsin or pronase prior to staining.**

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Antisera to human Caspase-1 (CT) were raised by repeated immunisation of rabbits with highly purified antigen. Purified IgG was prepared by affinity chromatography.
Buffer Solution	Phosphate buffered saline

Preservative Stabilisers	0.02% Sodium Azide
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	A 16 amino acid peptide located near human Caspase-1 carboxy terminus.
External Database Links	**UniProt:** P29466 Related reagents **Entrez Gene:** 834 CASP1 Related reagents
Synonyms	IL1BC, IL1BCE
RRID	AB_2069046
Specificity	**Rabbit anti Human Caspase-1 antibody** recognizes an epitope within the C-terminal region (CT) of human Caspase-1, otherwise known as IL-1Beta converting enzyme. Caspase-1 is an intracellular cysteine protease, identified as a mammalian homologue to *C. elegans* cell death gene (ced-3). Caspase-1 has been classified as an inflammatory, rather than apoptotic caspase, due to its essential role in the cleavage of the inactive precursors of the cytokines IL-1beta and IL-18, into their mature activated and secretable forms. Regulation of pro-inflammatory cytokines by Caspase-1 has made inhibitors of Caspase-1 a possible target for use as therapeutic drugs for the treatment of inflammatory diseases (Ghayur *et al.* 1997). Rabbit anti Human Caspase-1 antibody detects a cleaved subunit band of approximately 21 kDa in human heart cell lysates (predicted precursor MWT 45.2kDa).
Histology Positive Control Tissue	Human heart.
References	1. Faner, R. *et al.* (2016) The inflammasome pathway in stable COPD and acute exacerbations. ERJ Open Res. 2 (3): 00002-2016.
Further Reading	1. Kostura, M.J. *et al.* (1989) Identification of a monocyte specific pre-interleukin 1 beta convertase activity. Proc Natl Acad Sci U S A. 86 (14): 5227-31. 2. Miura, M. *et al.* (1993) Induction of apoptosis in fibroblasts by IL-1 beta-converting enzyme, a mammalian homolog of the *C. elegans* cell death gene ced-3. Cell. 75 (4): 653-60. 3. Ghayur, T.*et al.* (1997) Caspase-1 processes IFN-gamma-inducing factor and regulates LPS-induced IFN-gamma production. Nature. 386 (6625): 619-23. 4. Fantuzzi, G. *et al.* (1998) Interleukin-18 regulation of interferon gamma production and

	cell proliferation as shown in interleukin-1beta-converting enzyme (caspase-1)-deficient mice. Blood. 91 (6): 2118-25.
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/AHP963 10040
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

ANTIGEN RETRIEVAL BUFFER, pH8.0 (BUF025A)
TidyBlot WESTERN BLOT DETECTION REAGENT:HRP (STAR209P)

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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

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