

Datasheet: AHP963

BATCH NUMBER 031214

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	<p>UniProt: P29466 Related reagents</p> <p>Entrez Gene: 834 CASP1 Related reagents</p>
Synonyms	IL1BC, IL1BCE
RRID	AB_2069046
Specificity	<p>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 <i>C. elegans</i> cell death gene (<i>ced-3</i>).</p> <p>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.</p> <p>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).</p> <p>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).</p>
Histology Positive Control Tissue	Human heart.
References	1. Faner, R. <i>et al.</i> (2016) The inflammasome pathway in stable COPD and acute exacerbations. ERJ Open Research. 2 (3): 00002-2016-2-2016.
Further Reading	<ol style="list-style-type: none"> Ghayur, T.<i>et al.</i> (1997) Caspase-1 processes IFN-gamma-inducing factor and regulates LPS-induced IFN-gamma production. Nature. 386 (6625): 619-23. Fantuzzi, G. <i>et al.</i> (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. Kostura, M.J. <i>et al.</i> (1989) Identification of a monocyte specific pre-interleukin 1 beta convertase activity. Proc Natl Acad Sci U S A. 86 (14): 5227-31. Miura, M. <i>et al.</i> (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.](#)

Storage Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee 18 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 (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)

Sheep Anti Rabbit IgG (STAR35...) [RPE](#)

Goat Anti Rabbit IgG (H/L) (STAR124...) [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](https://www.bio-rad-antibodies.com/datasheets)

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