

# Datasheet: AHP963 BATCH NUMBER 155496

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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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 winhighly purified antigen. Purified IgG was prepared by affinity chromatography.	ith
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 <i>C. elegans</i> 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. <i>et al.</i> (2016) The inflammasome pathway in stable COPD and acute exacerbations. <u>ERJ Open Research. 2 (3): 00002-2016-2-2016</u> .		
Further Reading	<ol> <li>Ghayur, T.et al. (1997) Caspase-1 processes IFN-gamma-inducing factor and regulates LPS-induced IFN-gamma production. Nature. 386 (6625): 619-23.</li> <li>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.</li> <li>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.</li> <li>Miura, M. et al. (1993) Induction of apoptosis in fibroblasts by IL-1 beta-converting</li> </ol>		

enzyme, a mammalian homolog of the *C. elegans* cell death gene ced-3. <u>Cell. 75 (4):</u> 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 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

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**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)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Worldwide

Tel: +44 (0)1865 852 700

Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

Email: antibody\_sales\_us@bio-rad.com

Fax: +44 (0)1865 852 739
Email: antibody\_sales\_uk@bio-rad.com

Email: antibody\_sales\_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M364399'200529'

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