

# Caspase-1 (mouse) monoclonal antibody (4G8)

Caspases are a highly conserved family of cysteine proteases and are synthesized as inactive zymogens, which are cleaved at Asp-x sites during apoptosis, generating large and small subunits that heterodimerize to form the active enzyme. Caspase-1 is a member of the ICE/CED-3 family of caspases and is detected in the pro-form as a protein of 45 kDa.

Caspase-1 generates the bioactive form of the pro-inflammatory cytokine IL-1 $\beta$  from its biologically inactive precursor. Overexpression of caspase-1 in cells induces apoptosis, which can be inhibited by cytokine response modifier A (CrmA). Caspase-1 mRNA is predominantly expressed in the spleen and lung and to a lesser extent in skeletal muscle, kidney, testis and heart and within these tissues macrophages preferentially express caspase-1. Caspase-1 deficient mice have no gross abnormalities, however, macrophages from caspase-1-deficient mice are defective in IL- $\beta$  processing and release.

This antibody is covered by our [Worry-Free Guarantee](#).

Citations: 1

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## Ordering Information

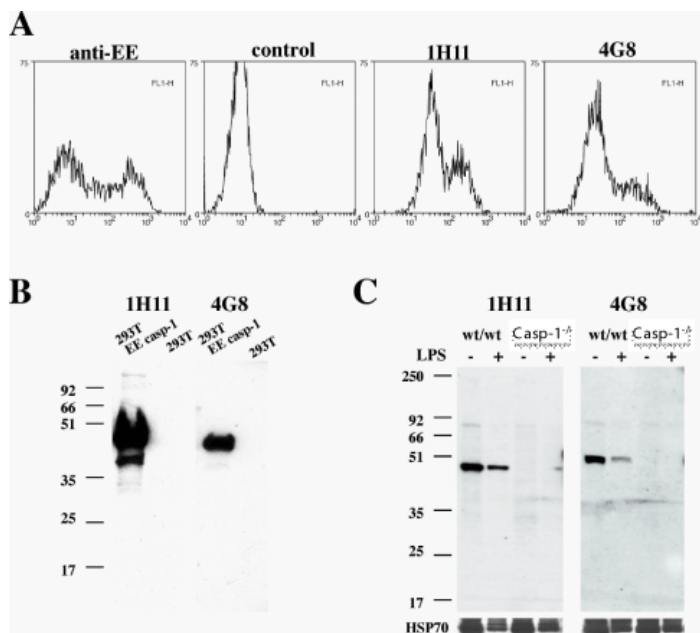
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ALX-804-531-C100

100 $\mu$ g

Manuals, SDS & CofA

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**Figure A:** MAbs to caspase-1 (clone 1H11 ([Prod.No. ALX-804-530](#)) and clone 4G8 (Prod. No. ALX-804-531)) detect overexpressed caspase-1 in 293T cells transiently transfected with an EE tagged inactive cysteine mutant of mouse caspase-1 by flow cytometry.

**Figure B:** MAbs to caspase-1 (clone 1H11 (Prod.No. ALX-804-530) and clone 4G8 (Prod. No. ALX-804-531)) detect overexpressed caspase-1 in 293T cells transiently transfected with a EE tagged inactive cysteine mutant of mouse caspase-1 as a band of ~45 kDa.

**Figure C:** MAbs to caspase-1 (clone 1H11 (Prod.No. ALX-804-530) and clone 4G8 (Prod. No. ALX-804-531)) detect endogenous pro-caspase-1 in spleen from WT mice

# Handling & Storage

Short Term Storage +4°C

Long Term Storage -20°C

Shipping Blue Ice

## Regulatory Status

RUO - Research Use Only

# Product Details

Alternative Name	IL-1β converting enzyme, Interleukin-1β converting enzyme, ICE
Application	ELISA, Flow Cytometry, WB
Application Notes	Detects a band of ~45kDa by Western blot.
Clone	4G8
Crossreactivity	Does not cross-react with mouse caspase-11 or -12.
Formulation	Liquid. Protein G Sepharose™ purified antibody in PBS containing 0.02% sodium azide.
Host	Rat
Immunogen	p20 fragment of mouse caspase-1 and synthetic peptide corresponding to aa 206-220 (T206ALEMVKEVKEFAAC220) of mouse caspase-1.
Isotype	IgG1
Species Reactivity	Mouse
Specificity	Recognizes an epitope within the p20 fragment of caspase-1.
Technical Info / Product Notes	SEPHAROSE is a trademark of GE Healthcare companies.
UniProt ID	P29452

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ENZO LIFE SCIENCES,  
INC.  
Phone: 800.942.0430  
[info-  
usa@enzolifesciences.com](mailto:info-usa@enzolifesciences.com)

European Sales Office  
ENZO LIFE SCIENCES  
(ELS) AG  
Phone: +41 61 926 8989  
[info-  
eu@enzolifesciences.com](mailto:info-eu@enzolifesciences.com)

Belgium, The Netherlands  
& Luxembourg  
Phone: +32 3 466 0420  
[info-  
be@enzolifesciences.com](mailto:info-be@enzolifesciences.com)

France  
Phone: +33 472 440 655  
[info-  
fr@enzolifesciences.com](mailto:info-fr@enzolifesciences.com)

Germany  
Phone: +49 7621 5500 526  
[info-  
de@enzolifesciences.com](mailto:info-de@enzolifesciences.com)

UK & Ireland  
Phone (UK customers):  
0845 601 1488  
Phone: +44 1392 825900  
[info-  
uk@enzolifesciences.com](mailto:info-uk@enzolifesciences.com)