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

Capases 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-1β 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-β processing and release.

This antibody is covered by our Worry-Free Guarantee.

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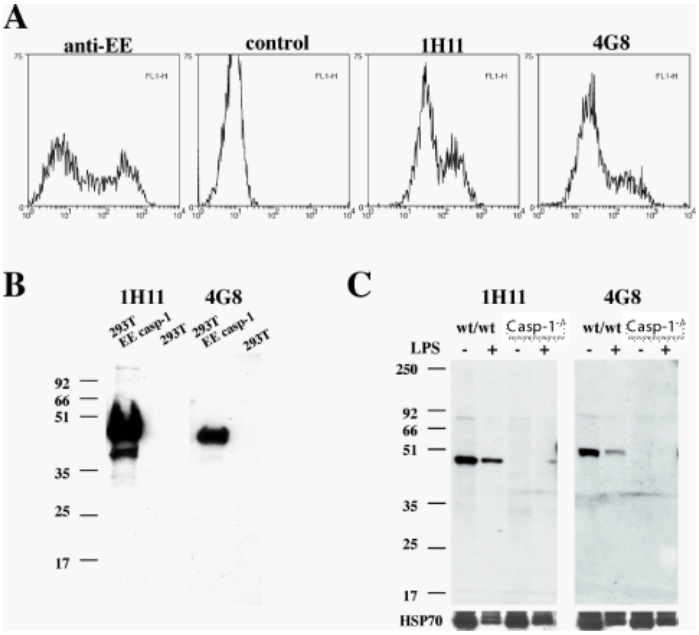


Figure A: MAbs to caspase-1 (clone 1H11 (Prod.No. ALX-804-530) and clone 4G8 (Prod. No. ALX-804-531)) detect overexpressed caspase-1 in 293T cells transiently transfected with an EE tagged inactive cysteine mutant of mouse caspase-1 by flow cytometry.
Figure B: MAbs to caspase-1 (clone 1H11 (Prod.No.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