AdipoGen® LIFE SCIENCES

PRODUCT DATA SHEET

AG-20B-0042 08-Sep-2011

anti-Caspase-1 (p20) (mouse), mAb (Casper-1)

[Interleukin-1β Convertase; IL-1BC; Interleukin-1β-converting Enzyme; ICE]

AG-20B-0042-C100	100 µg

Clone	Casper-1
Source/Host	Purified from concentrated hybridoma tissue culture supernatant.
Isotype	Mouse IgG1
Immunogen	Recombinant mouse caspase-1.

Handling / Storage

Shipping	BLUE ICE
Short Term Storage	+4°C
Long Term Storage	-20°C

After opening, prepare aliquots and store at -20°C. Avoid freeze/thaw cycles.

Use / Stability

Stable for at least 1 year after receipt when stored at -20°C.

MSDS available at www.adipogen.com or upon request.

Product Specifications

Specificity	Recognizes endogenous full-length and activated (p20 fragment) mouse caspase-1.
Species Crossreactivity	Mouse
Application	**Western Blot (see online protocol):** (1µg/ml) (no need to precipitate the cell supernatant for the detection of caspase-1 (mouse) upon inflammasome activation) **Immunohistochemistry:** (1:500; paraffin sections) **Immunoprecipitation:** (1:200)
Purity	≥95% (SDS-PAGE)
Formulation	Liquid. In PBS containing 10% glycerol and 0.02% sodium azide.
Concentration	1mg/ml
Isotype Negative Control	Mouse IgG1 Isotype Control

Product Description

Caspase-1 is the best-described inflammatory caspase. It processes the cytokines interleukin-1β (IL-1β) and IL-18 and induces pyroptotic cell death. Caspase-1 is activated by multiprotein complexes called Inflammasomes in response to numerous stimuli that are detected through distinct inflammasomes. NLRC4 responds to cytosolic flagellin, murine NLRP1b responds to anthrax lethal toxin, AIM2 responds to cytosolic DNA and NLRP3 responds to a variety of agonists including crystals.

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Product Specific References

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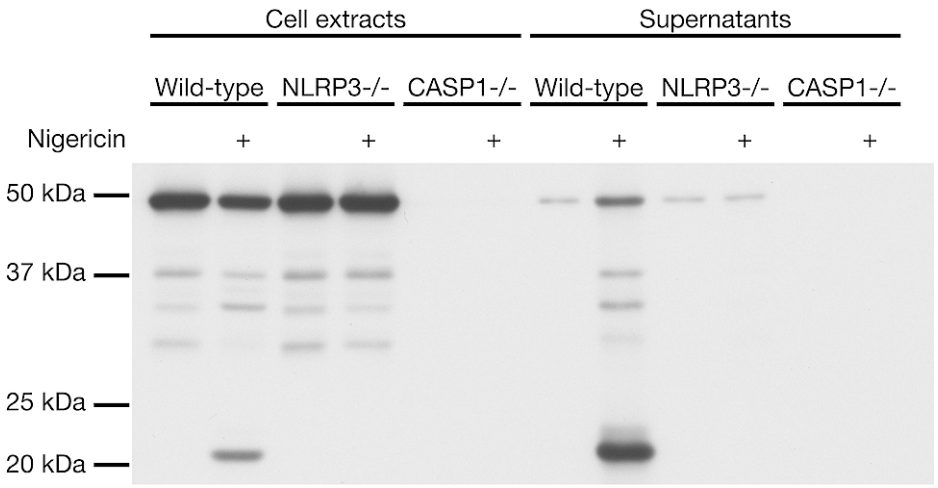

Figure 1: Mouse caspase-1 (p20) is detected by immunoblotting using anti-Caspase-1 (p20) (mouse), mAb (Casper-1) (Prod. No. AG-20B-0042). **Method:** Caspase-1 was analyzed by Western blot in cell extracts and supernatants of differentiated bone marrow-derived dendritic cells (BMDCs) from wild-type, NLRP3$^{-/-}$ and caspase-1$^{-/-}$ mice activated or not by 5 µM Nigericin (Prod. No. AG-CN2-0020) for 30 min. Cell extracts and supernatants were separated by SDS-PAGE under reducing conditions, transferred to nitrocellulose and incubated with anti-Caspase-1 (p20) (mouse), mAb (Casper-1) (1µg/ml). Proteins were visualized by a chemiluminescence detection system.

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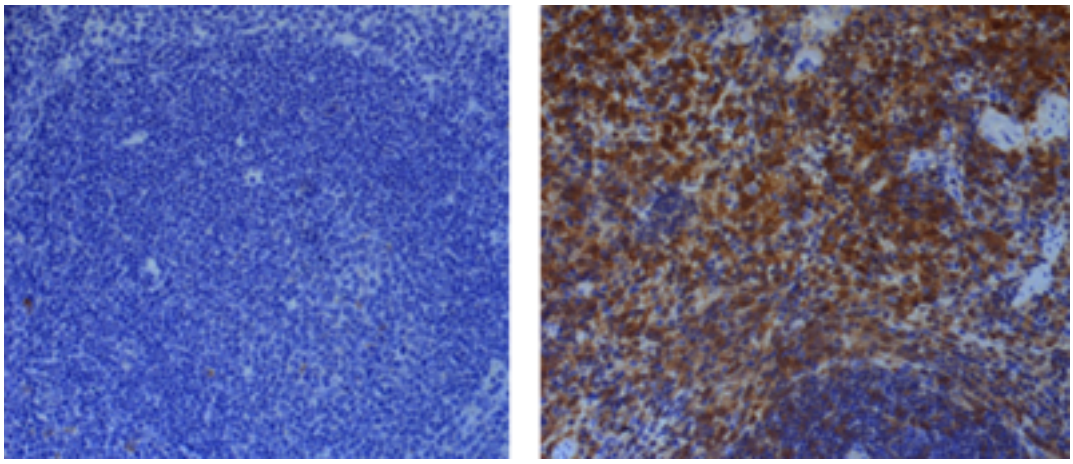

Figure 2: Immunohistochemical staining of endogenous mouse Caspase-1 in mouse spleen using anti-Caspase-1 (p20) (mouse), mAb (Casper-1) (Prod. No. AG-20B-0042). **Method:** Mouse spleen tissues (paraffin sections) from Caspase-1 KO (left) or WT (right) mice were stained using anti-Caspase-1 (p20) (mouse), mAb (Casper-1) (Prod. No. AG-20B-0042) (1:500) by standard immunohistochemistry (antigen retrieval performed with sodium citrate).

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