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www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for 200-301-H62

Caspase-1 Antibody

Overview

Description:	Anti-Caspase-1 (MOUSE) Monoclonal Antibody - 200-301-H62
Item No.:	200-301-H62
Size:	100 µg
Applications:	IF, IHC, WB
Reactivity:	Human, Mouse
Host Species:	Mouse

Product Details

Background:	Anti-Caspase-1 detects human Caspase. Caspase proteins are a family of cysteine proteases that are key mediators of programmed cell death or apoptosis. The precursor form of all caspase proteins is composed of a prodomain, and large and small catalytic subunits. The active forms of caspases are generated by several stimuli including ligand-receptor interactions, growth factor deprivation and inhibitors of cellular functions. All known caspases require cleavage adjacent to aspartates to liberate one large and one small subunit, which associate into tetramer to form the active enzyme. Caspase-1 (ICE, IL-1b converting enzyme) is similar to the cell death gene CED-3 of Caenorhabditilis elegans and regulates multiple proinflammatory cytokines, including interleukin-1b and interferon-gamma-inducing factor. Anti-Caspase-1 antibody is ideal for investigators involved in apoptosis research.
Synonyms:	IL1BC, IL1BCE, Caspase-1, CASP-1, 3.4.22.36, Interleukin-1 beta convertase, IL-1BC, Interleukin-1 beta-converting enzyme, ICE, IL-1 beta-converting enzyme, p45, Caspase-1 subunit p20, Caspase-1 subunit p10
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	14F468
Format:	IgG1

Target Details

Gene Name:	CASP1

Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide
Immunogen:	Caspase-1 Antibody was produced in mice by repeated immunizations with a synthetic peptide corresponding to amino acids near the c-terminus of the immunogen, human Caspase-1.
Purity/Specificity:	Anti-Caspase-1 Antibody was purified by Protein G chromatography. A BLAST analysis was used to suggest cross-reactivity with Anti-Caspase-1 from human and mouse based on 100% homology with the immunizing sequence. Cross-reactivity with Anti-Caspase-1 from other sources has not been determined.
Relevant Links:	• UniProtKB - P29466 • NCBI - NP_001214.1 • GeneID - 834

Application Details

Tested Applications:	IF, IHC, WB
Application Note:	Anti-Caspase-1 antibody has been tested in IHC-F, IHC-P, IF, and WB. Expect a band approximately 46kDa on specific lysates. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IHC:	1:100 - 1:500
WB:	0.5-2 µg/mL

Formulation

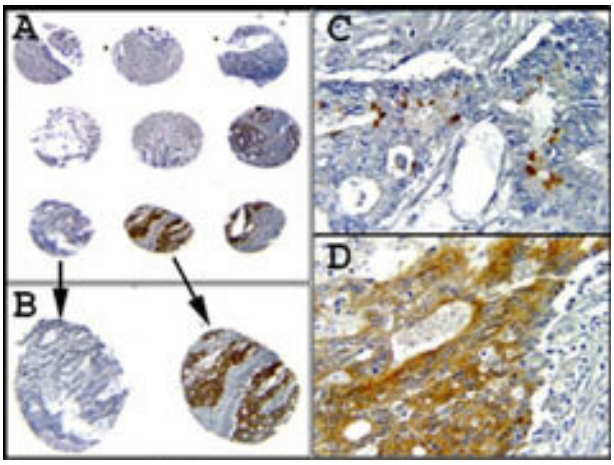
Physical State:	Liquid
Concentration:	1.0 mg/ml by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.05% (w/v) Sodium Azide

Shipping & Handling

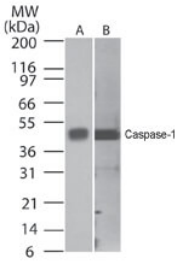
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Immunohistochemistry
Immunohistochemistry of mouse Anti-Caspase-1 antibody. Tissue: human colon cancer. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Caspase-1 at 5 µg/ml for 1 h at RT. Secondary antibody: Peroxidase mouse secondary antibody at 1:10,000 for 45 min at RT. Localization: Caspase-1 is a cytoplasmic protein. Staining: Caspase-1 has a DAB chromogen and Hematoxylin counterstain. A). Only rare staining is observed. B). Abundant staining is observed. A and B). Two of these sections are shown at higher magnifications. C). Differential staining was observed.



Western Blot
Western Blot of Mouse Anti-Caspase-1 antibody. Lane A: Human HeLa. Lane B: Mouse NIH3T3 lysate. Load: 30 µg per lane. Primary antibody: Caspase-1 antibody at 0.5 µg/ml and 2 µg/ml respectively for overnight at 4°C.
Secondary antibody: IRDye800™ mouse secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 45.2/45 kDa for Caspase-1. Other band(s): none.

Disclaimer

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