Product Datasheet

Caspase-1 Antibody (14F468) - Azide and BSA Free
NBP2-33230

Unit Size: 0.1 mg

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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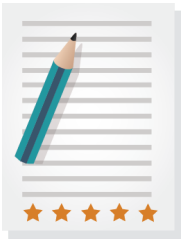
Updated 2/17/2025 v.20.1



NBP2-33230

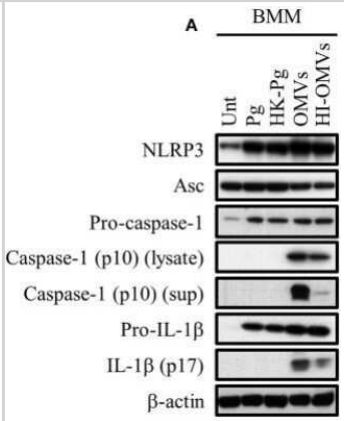
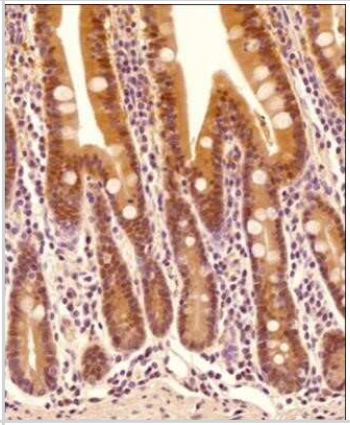
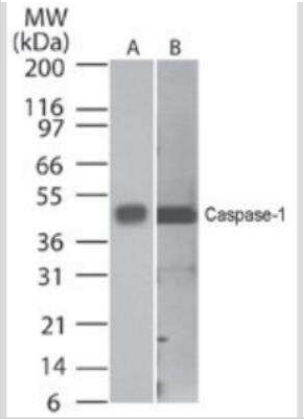
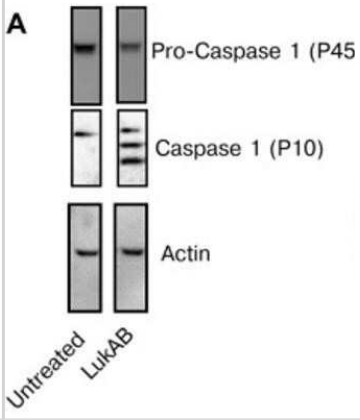
Caspase-1 Antibody (14F468) - Azide and BSA Free

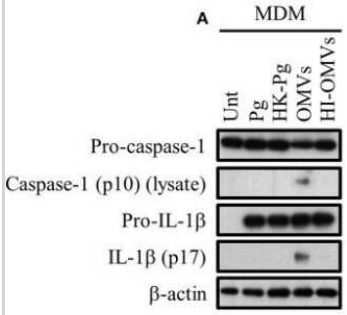
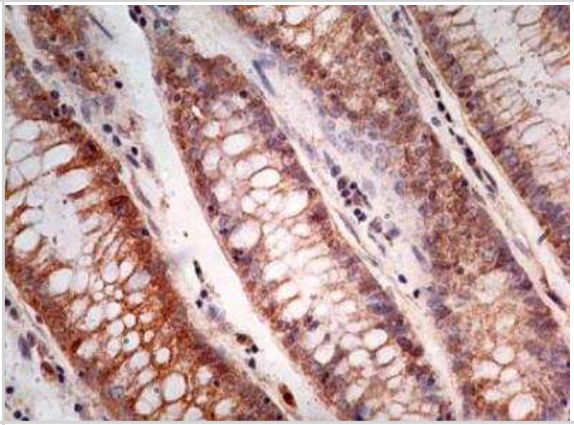
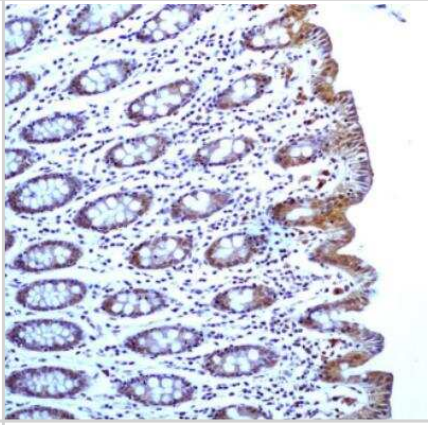
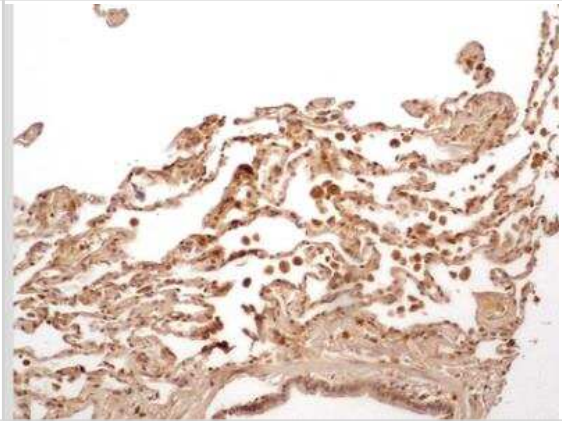
Product Information	
Unit Size	0.1 mg
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	14F468
Preservative	No Preservative
Isotype	IgG1 Kappa
Purity	Protein G purified
Buffer	PBS
Target Molecular Weight	45.2 kDa

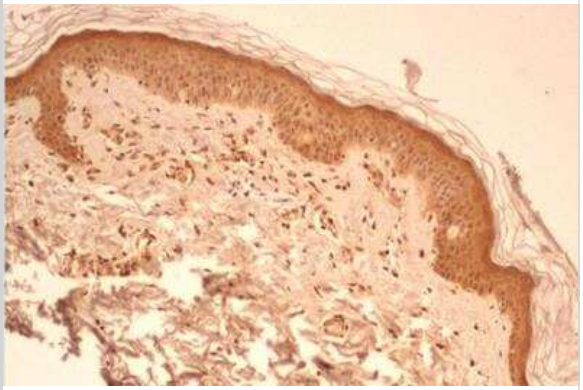
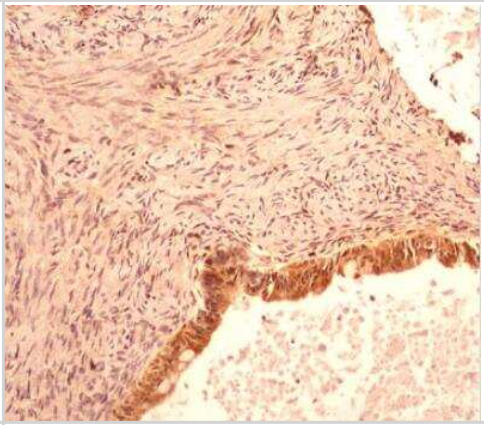
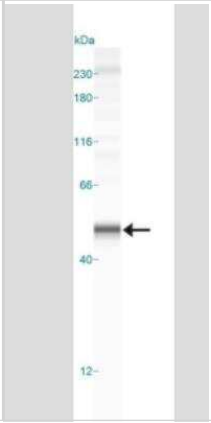
Product Description	
Host	Mouse
Gene ID	834
Gene Symbol	CASP1
Species	Human, Mouse, Rat
Reactivity Notes	Immunogen's sequence similarity with other species: Porcine (85%), Equine (80%), Canine (70%). Rat reactivity reported in scientific literature (PMID: 22133203).
Specificity/Sensitivity	Caspase-1 Antibody (14F468) will recognize full-length Caspase-1 and cleaved caspase-1 forms that retain amino acids 371-390 of the Caspase-1 protein.
Immunogen	Caspase-1 Antibody (14F468) - Azide and BSA Free was developed against a synthetic peptide corresponding to amino acids 371-390 RKVRFSFEQPDGRAQMPTTE of human caspase-1.

Product Application Details	
Applications	Western Blot, Simple Western, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 0.5-2 ug/ml, Simple Western 1:50, Immunohistochemistry 1:10 - 1:500, Immunohistochemistry-Paraffin 1:10-1:500
Application Notes	Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10 mM sodium citrate buffer, pH 6.0 for 10-20 min followed by cooling at RT for 20 min. In Simple Western only 10-15 uL of the recommended dilution is used per data point. See Simple Western Antibody Database for Simple Western validation: antibody dilution of 1:50 The observed molecular weight of the protein may vary from the listed predicted molecular weight due to post translational modifications, post translation cleavages, relative charges, and other experimental factors.

Images

P. gingivalis and its OMVs differentially induce inflammasome signaling and pyroptosis in murine macrophages. BMM were infected as before (2 h at MOI of 25:1, see Materials and Methods) with viable P. gingivalis (Pg), heat-killed-Pg (HK-Pg), OMVs, or heat-inactivated-OMVs (HI-OMVs) and the activation of inflammasome components in the lysates [or supernatants (sup) where indicated] measured after 24 h by Western blot; beta-actin serves as a loading control throughout. Western blot data are representative of at least three independent experiments. Image collected and cropped by CiteAb from the following publication (https://journal.frontiersin.org/article/10.3389/fcimb.2017.00351/full), licensed under a CC-BY license. Image using the standard format of this product.	
Tissue section of human intestine using Caspase-1 antibody (clone 14F468) at 5ug/ml concentration (1:200 dilution). The primary antibody binding to Caspase 1 in cells was detected using HRP conjugated anti-Mouse secondary antibody with DAB reagent, and the sections were further counterstained with hematoxylin for labeling cellular nuclei. This Caspase 1 antibody generated a diffused but specific cytoplasmic staining in columnar epithelia cells of villi, and a few cells depicted nuclear staining also. Only a subset of connective tissue cells in lamina propria depicted positivity (cytoplasmic) for this protein. Image using the standard format of this product.	
Analysis in human HeLa (A) and mouse NIH3T3 lysate probed with Caspase-1 antibody at 0.5 ug/ml and 2 ug/ml, respectively.	
LukAB is a potent activator of Caspase 1. THP1 cells were intoxicated with 50 ng/mL LukAB for 1 hour and cell lysates were analyzed by immunoblot for Caspase 1 cleavage, which indicates activation. Image collected and cropped by CiteAb from the following publication (//doi.org/10.1371/journal.ppat.1004970) licensed under a CC-BY license. Image using the standard format of this product.	

P. gingivalis and its OMVs differentially induce inflammasome signaling and pyroptosis in human macrophages. MDM were infected as before (2 h at MOI of 25:1, see Materials and Methods) with viable P. gingivalis (Pg), heat-killed-Pg (HK-Pg), OMVs, or heat-inactivated-OMVs (HI-OMVs) and the activation of inflammasome components in the lysates was measured after 24 h by Western blot; beta-actin serves as a loading control throughout. Western blot data are representative of at least three independent experiments. Image collected and cropped by CiteAb from the following publication (https://journal.frontiersin.org/article/10.3389/fcimb.2017.00351/full), licensed under a CC-BY license. Image using the standard format of this product.	
Analysis in adenocarcinoma of the rectum (5 ug/ml), peroxidase-conjugate and DAB chromogen. Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10 mM sodium citrate buffer, pH 6.0 for 10-20 min followed by cooling at RT for 20 min.	
Analysis in a section of normal human colon using 5 ug/ml concentration. Distinct cytoplasmic staining along with some nuclear positivity was observed in crypts/mucosa, and staining was found to be more intense in the absorptive columnar epithelial cells. [10X Magnification]	
Analysis in a section of normal lung from human using 5 ug/ml concentration. In this representative lung section, different type of cells including pseudostratified columnar epithelium of bronchiole and the simple squamous epithelium of alveoli may be seen to develop immunoreactivity for Caspase 1. [10X Magnification]	

Analysis in a section of normal skin from human using 5 ug/ml concentration. Strong cytoplasmic/nuclear staining developed in all the epidermal cells, blood vessels and some cells of the dermal connective tissues layer. [10X Magnification]	
Analysis in a section of human ovarian cancer using 5 ug/ml concentration.	
Analysis in 1.0 mg/ml of HeLa lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.	

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