

## Anti-Caspase-1(P10)/CASP1 Antibody Picoband®

Catalog Number: PA1522

### About CASP1

Caspase 1, apoptosis-related cysteine protease, is a cysteine protease that regulates inflammatory processes through its capacity to process and activate the interleukin-1-beta, IL18, and IL33 precursor proteins. Caspase 1 was purified ICE from the cytosol of the THP. human monocytic cell line and found that the active protease was made up of 2 peptides, which they called p20 and p10 based on their apparent molecular masses by SDS-PAGE. It belongs to a family of cysteine proteases known as caspases that always cleave proteins following an aspartic acid residue. The Caspase1 gene consists of 10 exons spanning at least 10.6 kb. The Caspase 1 gene is mapped to 11q23, a site frequently involved in rearrangement in human cancers, including a number of leukemias and lymphomas, by Southern DNA blot analysis of rodent-human hybrids and by in situ hybridization to normal human metaphase chromosomes. Caspase 1 has been shown to induce cell necrosis or pyroptosis and may function in various developmental stages.

### Overview

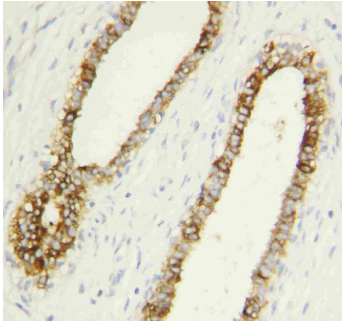
Product Name	Anti-Caspase-1(P10)/CASP1 Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-Caspase-1 (P10)/CASP1 Antibody catalog # PA1522. Tested in IHC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg Thimerosal, 0.05mg NaN <sub>3</sub> . *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P29466

### Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Caspase-1(P10).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western

	blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human Western blot, 0.1-0.5ug/ml, Human

## Anti-Caspase-1(P10)/CASP1 Antibody Picoband® (PA1522) Images



Anti-Caspase-1(P10) antibody, PA1522, IHC(P)IHC(P): Human Mammary Cancer Tissue



Anti-Caspase-1(P10) antibody, PA1522, Western blotting  
All lanes: Anti CASP1(P10) (PA1522) at 0.5ug/ml  
Lane 1: MCF-7 Whole Cell Lysate at 40ug  
Lane 2: HELA Whole Cell Lysate at 40ug  
Lane 3: SW620 Whole Cell Lysate at 40ug  
Predicted bind size: 45KD  
Observed bind size: 45KD

## 22 Publications Citing This Product

1. PubMed ID: -, Peng Yuan, Xifeng Sun, Xiao Liu, Georg Hutterer, Karl Pummer, Boris Hager, Zhangqun Ye, Zhiqiang Chen, Kaempferol alleviates calcium oxalate crystal-induced renal injury and crystal deposition via regulation of the AR/NOX2 signaling pathway, *Phytomedicine*, 2021, 153555, ISSN 0944-7113, <https://doi.org/10.1016/j.phymed.2021.153555>.

2. PubMed ID: 22101081, Fu Y, Zhao Z, Wu Y, Wu K, Xu X, Liu Y, Tong C. *J Ethnopharmacol.* 2012 Jan 6;139(1):26-33. Doi: 10.1016/J.Jep.2011.08.077. Epub 2011 Nov 10. Therapeutic Mechanisms Of Tongmai Dasheng Tablet On Tripterygium Glycosides Induced Rat Model For Premature...

3. PubMed ID: 24721321, Huang Kf, Huang Xp, Xiao Gq, Yang Hy, Lin Js, Diao Y. *Biomed Pharmacother.* 2014 May;68(4):455-61. Doi: 10.1016/J.Biopa.2014.03.005. Epub 2014 Mar 18. Kallistatin, A Novel Anti-Angiogenesis Agent, Inhibits Angiogenesis Via Inhibition Of The Nf-??b...

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