

Basic Information

Product Name	Anti-Caspase 1(p20)/CASP1 Antibody	
Gene Name	CASP1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E. coli-derived human Caspase 1(p20)/CASP1 recombinant protein (Position: N132-H404). Human CASP1 shares 67.3% and 69.2% amino acid (aa) sequence identity with mouse and rat CASP1, respectively.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	45 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000

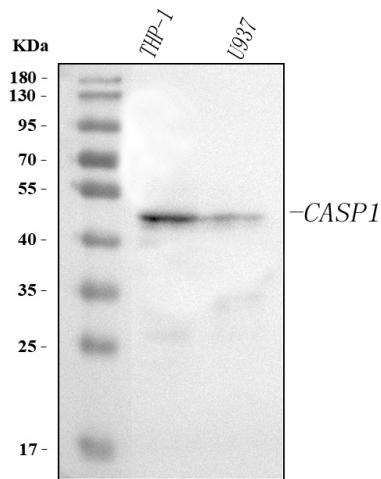
Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

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.

Selected Validation Data



Western blot analysis of anti-Caspase 1(p20)/CASP1 antibody (A00048-1). The sample well of each lane was loaded with 30 μ g of sample under reducing conditions.

Lane 1: human THP-2 whole cell lysates,

Lane 2: human U937 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-Caspase 1(p20)/CASP1 antigen affinity purified polyclonal antibody (A00048-1) and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Caspase 1(p20)/CASP1 at approximately 47 kDa. The expected band size for Caspase 1(p20)/CASP1 is at 47 kDa.