

Caspase-4 Polyclonal Antibody

Catalog No :	YT0657
Reactivity :	Human
Applications :	WB;IHC;IF;ELISA
Target :	Caspase-4
Fields :	>>Neutrophil extracellular trap formation;>>NOD-like receptor signaling pathway;>>Pathogenic Escherichia coli infection;>>Shigellosis;>>Salmonella infection
Gene Name :	CASP4
Protein Name :	Caspase4
Human Gene Id :	837
Human Swiss Prot No :	P49662
Mouse Gene Id :	12363
Mouse Swiss Prot No :	P70343
Immunogen :	The antiserum was produced against synthesized peptide derived from human Caspase-4. AA range:75-124
Specificity :	Caspase-4 Polyclonal Antibody detects endogenous levels of Caspase-4 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000.. IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 45kD

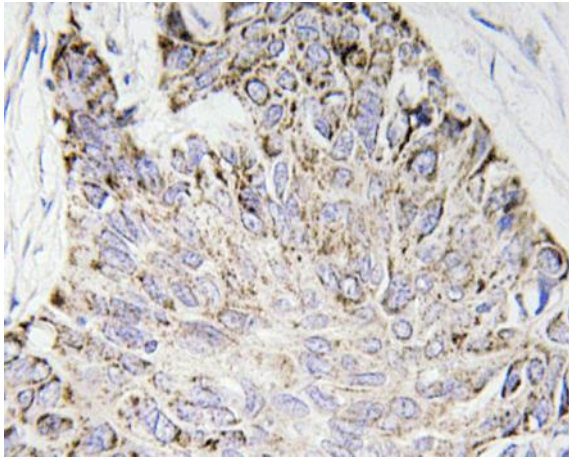
Background : This gene encodes a protein that is a member of the cysteine-aspartic acid protease (caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes composed of a prodomain and a large and small protease subunit. Activation of caspases requires proteolytic processing at conserved internal aspartic residues to generate a heterodimeric enzyme consisting of the large and small subunits. This caspase is able to cleave and activate its own precursor protein, as well as caspase 1 precursor. When overexpressed, this gene induces cell apoptosis. Alternative splicing results in transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2008],

Function : catalytic activity:Strict requirement for Asp at the P1 position. It has a preferred cleavage sequence of Tyr-Val-Ala-Asp-|- but also cleaves at Asp-Glu-Val-Asp-|-.function:Involved in the activation cascade of caspases responsible for apoptosis execution. Cleaves caspase-1.,PTM:The two subunits are derived from the precursor sequence by an autocatalytic mechanism or by cleavage by Caspase-8.,similarity:Belongs to the peptidase C14A family.,similarity:Contains 1 CARD domain.,subunit:Heterotetramer that consists of two anti-parallel arranged heterodimers, each one formed by a small and a large subunit.,tissue specificity:Widely expressed, with highest levels in spleen and lung. Moderate expression in heart and liver, low expression in skeletal muscle, kidney and testis. Not found in the brain.,

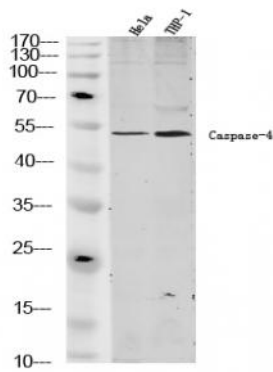
Subcellular Location : Cytoplasm, cytosol . Endoplasmic reticulum membrane ; Peripheral membrane protein ; Cytoplasmic side . Mitochondrion . Inflammasome . Secreted . Predominantly localizes to the endoplasmic reticulum (ER). Association with the ER membrane requires TMEM214 (PubMed:15123740). Released in the extracellular milieu by keratinocytes following UVB irradiation (PubMed:22246630). .

Expression : Widely expressed, including in keratinocytes and colonic and small intestinal epithelial cells (at protein level). Not detected in brain.

Products Images



Immunohistochemistry analysis of Caspase-4 antibody in paraffin-embedded human lung carcinoma tissue.



Western blot analysis of lysates from 1) Hela ,2)THP-1, (Green) primary antibody was diluted at 1:1000, 4° over night, secondary antibody(cat:RS23920)was diluted at 1:10000, 37° 1hour.