

## Caspase-4 Polyclonal Antibody

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

**Concentration :** 1 mg/ml

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

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**Observed Band :** 45kD

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**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],

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**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.,

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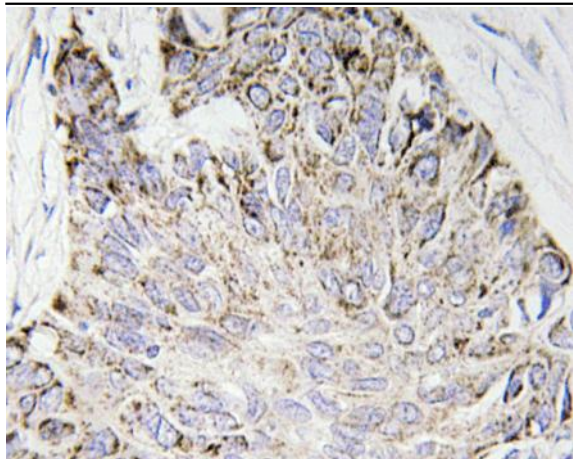
**Subcellular Location :** Cytoplasm, cytosol . Endoplasmic reticulum membrane ; Peripheral membrane protein ; Cytoplasmic side . Mitochondrion . Inflammasome . Secreted . Predominantly localizes to the endoplasmic reticulum (ER). Association with the ER membrane requires TMEM214 (PubMed:15123740). Released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

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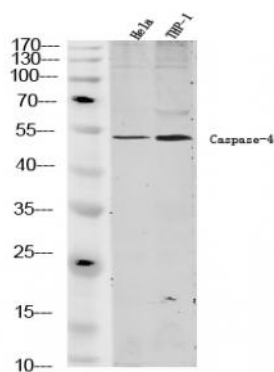
**Expression :** Widely expressed, including in keratinocytes and colonic and small intestinal epithelial cells (at protein level). Not detected in brain.

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## 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° 1 hour.