

**Anti-Caspase-2 Picoband Antibody**  
**Catalog # ABO12059****Specification**

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**Anti-Caspase-2 Picoband Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P42575</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Caspase-2(CASP2) detection. Tested with WB in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-Caspase-2 Picoband Antibody - Additional Information**

**Gene ID** 835

**Other Names**

Caspase-2, CASP-2, 3.4.22.55, Neural precursor cell expressed developmentally down-regulated protein 2, NEDD-2, Protease ICH-1, Caspase-2 subunit p18, Caspase-2 subunit p13, Caspase-2 subunit p12, CASP2, ICH1, NEDD2

**Calculated MW**

50685 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br>

**Tissue Specificity**

Expressed at higher levels in the embryonic lung, liver and kidney than in the heart and brain. In adults, higher level expression is seen in the placenta, lung, kidney, and pancreas than in the heart, brain, liver and skeletal muscle.

**Protein Name**

Caspase-2

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human CASP2(378-409aa RNTKRGSWYIEALAQVFSERACDMHVADMLVK), different from the related mouse and rat sequences by one amino acid.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins.

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Sequence Similarities**

Belongs to the peptidase C14A family.

**Anti-Caspase-2 Picoband Antibody - Protein Information**

**Name** CASP2

**Synonyms** ICH1, NEDD2

**Function**

Involved in the activation cascade of caspases responsible for apoptosis execution. Might function by either activating some proteins required for cell death or inactivating proteins necessary for cell survival (PubMed: [15073321](http://www.uniprot.org/citations/15073321)). Associates with PIDD1 and CRADD to form the PIDDosome, a complex that activates CASP2 and triggers apoptosis in response to genotoxic stress (PubMed: [15073321](http://www.uniprot.org/citations/15073321)).

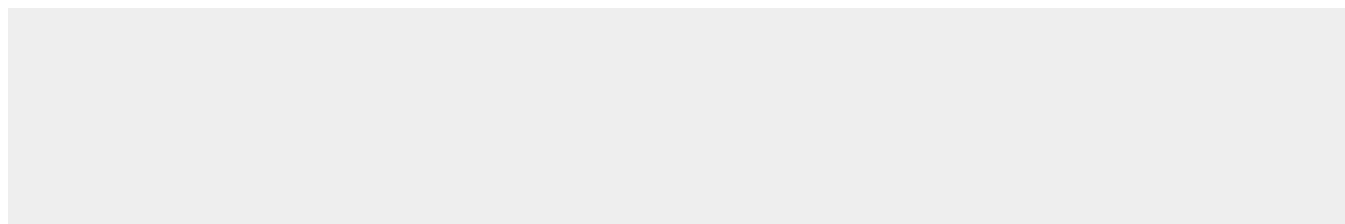
**Tissue Location**

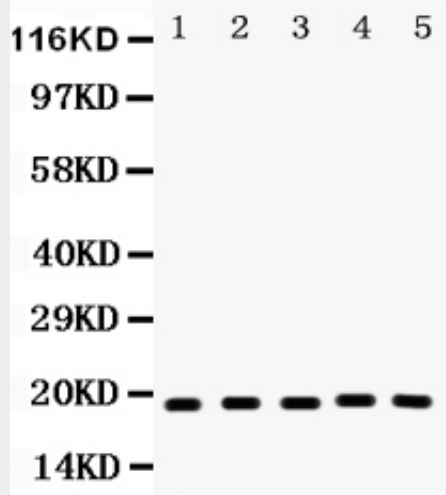
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**Anti-Caspase-2 Picoband Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-Caspase-2 Picoband Antibody - Images**



Anti- Caspase-2 Picoband antibody, ABO12059, Western blotting All lanes: Anti Caspase-2 (ABO12059) at 0.5ug/ml  
Lane 1: Rat Lung Tissue Lysate at 50ug  
Lane 2: Mouse Liver Tissue Lysate at 50ug  
Lane 3: A549 Whole Cell Lysate at 40ug  
Lane 4: PANC Whole Cell Lysate at 40ug  
Lane 5: 293T Whole Cell Lysate at 40ug  
Predicted bind size: 18KD  
Observed bind size: 18KD

#### **Anti-Caspase-2 Picoband Antibody - Background**

CASP2 is equal to Caspase-2. And Caspase-2, which is involved in stress-induced apoptosis, is recruited into a large protein complex, the molecular composition of which remains elusive. It is showed that activation of caspase-2 occurs in a complex that contains the death domain-containing protein PIDD, whose expression is induced by p53, and the adaptor protein RAIDD. Increased PIDD expression resulted in spontaneous activation of caspase-2 and sensitization to apoptosis by genotoxic stimuli. Caspase-2 acts both as a positive and negative cell death effector, depending upon cell lineage and stage of development.