

# Caspase-1 (Phospho Ser376) Rabbit pAb

CatalogNo: YP0749 **Orthogonal Validated** 

## Key Features

### Host Species

- Rabbit

### Reactivity

- Human, Mouse, Rat

### Applications

- WB, IHC, IF, ELISA

### MW

- 45kD (Observed)

### Isotype

- IgG

## Storage

**Storage\*** -15°C to -25°C/1 year (Do not lower than -25°C)**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

## Recommended Dilution Ratios

**WB 1:500-1:2000****IHC 1:100-1:300****ELISA 1:20000****IF 1:50-200**

## Basic Information

**Clonality** Polyclonal

## Immunogen Information

**Immunogen** The antiserum was produced against synthesized peptide derived from human Caspase 1 around the phosphorylation site of Ser376. AA range:342-391

## Specificity

Phospho-Caspase-1 (S376) Polyclonal Antibody detects endogenous levels of Caspase-1 protein only when phosphorylated at S376. The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):RFsFE

## Target Information

**Gene name** CASP1 IL1BC IL1BCE

**Protein Name** Caspase-1

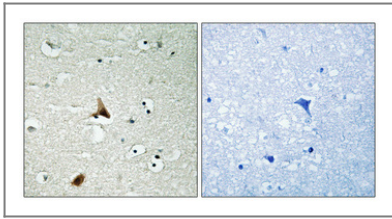
Organism	Gene ID	UniProt ID
Human	<a href="#">834;</a>	<a href="#">P29466;</a>
Mouse	<a href="#">12362;</a>	<a href="#">P29452;</a>
Rat		<a href="#">P43527;</a>

**Cellular Localization** Cytoplasm . Cell membrane .

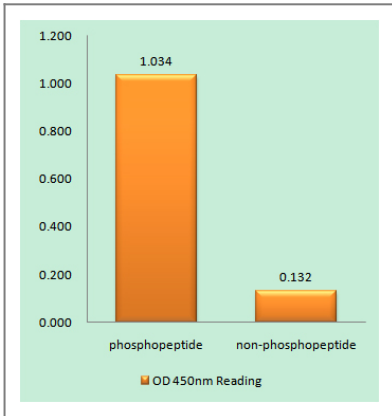
**Tissue specificity** Expressed in larger amounts in spleen and lung. Detected in liver, heart, small intestine, colon, thymus, prostate, skeletal muscle, peripheral blood leukocytes, kidney and testis. No expression in the brain.

**Function** Alternative products:Additional isoforms seem to exist,Catalytic activity:Strict requirement for an Asp residue at position P1 and has a preferred cleavage sequence of Tyr-Val-Ala-Asp-|-.,enzyme regulation:Specifically inhibited by the cowpox virus Crma protein.,Function:Thiol protease that cleaves IL-1 beta between an Asp and an Ala, releasing the mature cytokine which is involved in a variety of inflammatory processes. Important for defense against pathogens. Cleaves and activates sterol regulatory element binding proteins (SREBPs). Can also promote apoptosis.,PTM:The two subunits are derived from the precursor sequence by an autocatalytic mechanism.,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 20 kDa (p20) and a 10 kDa (p10) subunit. The p20 subunit can also form a heterodimer with the epsilon isoform which then has an inhibitory effect. May be a component of the inflammasome, a protein complex which also includes PYCARD, CARD8 and NALP2 and whose function would be the activation of proinflammatory caspases. Interacts with CARD17/INCA and CARD18.,tissue specificity:Expressed in larger amounts in spleen and lung. Detected in liver, heart, small intestine, colon, thymus, prostate, skeletal muscle, peripheral blood leukocytes, kidney and testis. No expression in the brain.,

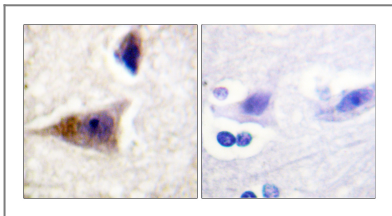
## Validation Data



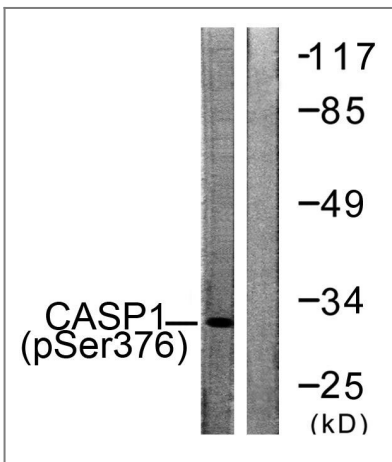
Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100 (4°C overnight). High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Caspase 1 (Phospho-Ser376) Antibody



Immunohistochemistry analysis of paraffin-embedded human brain, using Caspase 1 (Phospho-Ser376) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from 293 cells, using Caspase 1 (Phospho-Ser376) Antibody. The lane on the right is blocked with the phospho peptide.

## Contact information

Orders: [order@immunoway.com](mailto:order@immunoway.com)  
 Support: [tech@immunoway.com](mailto:tech@immunoway.com)  
 Telephone: 877-594-3616 (Toll Free), 408-747-0185  
 Website: <http://www.immunoway.com>  
 Address: 2200 Ringwood Ave San Jose, CA 95131 USA



Please scan the QR code to access additional product information:  
**Caspase-1 (Phospho Ser376) Rabbit pAb**

