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# Ipaf Antibody
**Catalog # ASC10186**

## Specification

### Ipaf Antibody - Product Information

| | |
|---|---|
| Application | **WB, ICC, IF** |
| Primary Accession | Q9NPP4 |
| Other Accession | NP_067032, 40788015 |
| Reactivity | **Human** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **IgG** |
| Calculated MW | **110 kDa KDa** |
| Application Notes | **Ipaf polyclonal antibody can be used for the detection of Ipaf by Western blot at 1 and 2 µg/mL. A 110 kDa band can be detected. Antibody can also be used for immunocytochemistry starting at 10 µg/mL. For immunofluorescence start at 10 µg/mL.** |

### Ipaf Antibody - Additional Information

Gene ID **58484**

**Other Names**
Ipaf Antibody: CLAN, IPAF, CLAN1, CLANA, CLANB, CLANC, CLAND, CARD12, CLR2.1, CLAN, UNQ6189/PRO20215, NLR family CARD domain-containing protein 4, CARD, LRR, and NACHT-containing protein, Clan protein, NLR family, CARD domain containing 4

**Target/Specificity**
NLRC4;

**Reconstitution & Storage**
Ipaf antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

**Precautions**
Ipaf Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Ipaf Antibody - Protein Information

**Name** NLRC4

**Function**
Key component of inflammasomes that indirectly senses specific proteins from pathogenic bacteria and fungi and responds by assembling an inflammasome complex that promotes caspase-1 activation, cytokine production and macrophage pyroptosis (PubMed:<a

href="http://www.uniprot.org/citations/15107016" target="_blank">15107016</a>). The NLRC4 inflammasome is activated as part of the innate immune response to a range of intracellular bacteria (By similarity).

**Cellular Location**
Cytoplasm. Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q3UP24}. Inflammasome

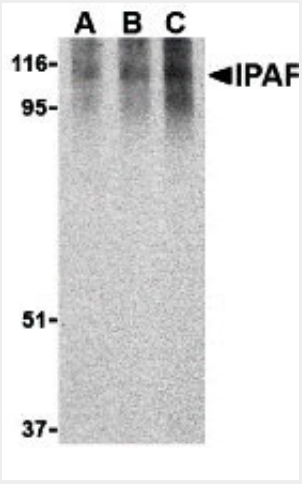
**Tissue Location**
Isoform 2 is expressed ubiquitously, although highly expressed in lung and spleen. Isoform 1 is highly expressed in lung, followed by leukocytes especially monocytes, lymph node, colon, brain, prostate, placenta, spleen, bone marrow and fetal liver. Isoform 4 is only detected in brain

## Ipaf Antibody - Protocols

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

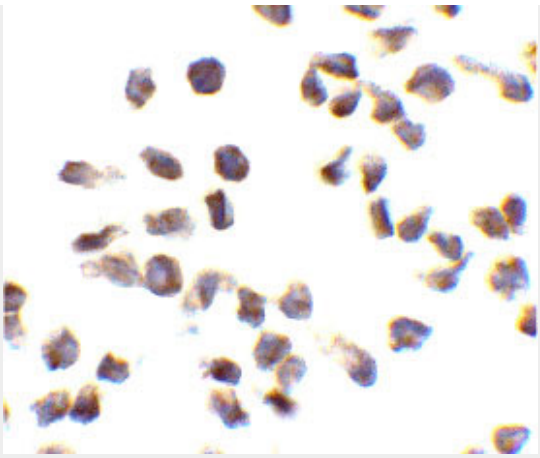
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Ipaf Antibody - Images

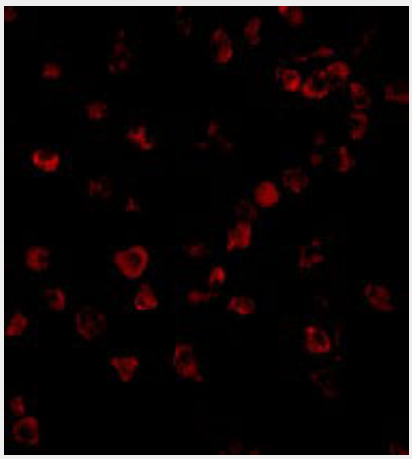



Western blot analysis of Ipaf in human PBL lysate with Ipaf antibody at 0.5 (lane A), 1 (lane B), and 2 (lane C) µg/mL, respectively.

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Immunocytochemistry of Ipaf in THP-1 cells with Ipaf antibody at 10 µg/mL.



Immunofluorescence of Ipaf in THP1 cells with Ipaf antibody at 10 µg/mL.

## Ipaf Antibody - Background

Ipaf Antibody: Apoptosis is related to many diseases and induced by a family of cell death receptors and their ligands. Cell death signals are transduced by death domain containing adaptor molecules and proteases including several members of the caspase family. Another family of proteins that functions as a critical regulator of apoptosis and NFκ signaling pathways is the CED-4/Apaf-1 (apoptosis protein activating factor-1) protein family. Ipaf (ICE protease activating factor) is a CED-4/Apaf-1 family member that activates caspase-1/ICE and can induce apoptosis in human cells in a caspase-1 dependent manner. Ipaf and caspase-1 are thought to interact with each other through the association of the Ipaf amino-terminal CARD (caspase recruitment domain) and amino-terminal CARD of caspase-1.

## Ipaf Antibody - References

Li P, Nijhawan D, Budihardjo I, et al. Cytochrome c and dATP-dependent formation of Apaf-1/caspase-9 complex initiates an apoptotic protease cascade. Cell 1997; 91:479-89.
Poyet J-L, Srinivaula SM, Tnani M, et al. Identification of Ipaf, a human caspase-1-activating protein related to Apaf-1. J. Biol. Chem. 2001; 276:28309-13.
Geddes BJ, Wang L, Huang WJ, et al. Human CARD12 is a novel CED4/Apaf-1 family member that induces apoptosis. Biochem. Biophys. Res. Commun. 2001; 284:77-82.