

# Ipaf Antibody

Catalog # ASC10186

#### **Product Information**

Application WB, IF, ICC, E
Primary Accession Q9NPP4

Other Accession <u>NP\_067032</u>, <u>40788015</u>

Reactivity
Human
Rabbit
Clonality
Polyclonal
Isotype
IgG
Calculated MW
116159
Concentration (mg/ml)
Conjugate
Human
Rabbit
Polyclonal
IgG
Unconjugate

**Application Notes** Ipaf polyclonal antibody can be used for the detection of Ipaf by Western blot

at 1 and 2 [g/mL. A 110 kDa band can be detected. Antibody can also be used for immunocytochemistry starting at 10 [g/mL. For immunofluorescence start

at 10 □g/mL.

#### **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°C for three months and -20°C, 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.

### **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:15107016). 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

## **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.

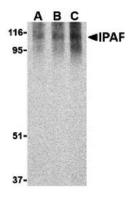
#### References

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.

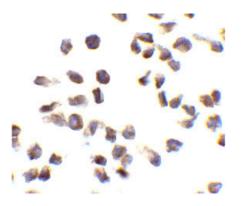
Poyet J-L, Srinivaula SM, Tnani M, et al. Identification of Ipaf, a human caspase-1-activating protein related to Apaf-1. J. Biol. Chem. 2001; 276:28309-13.

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.

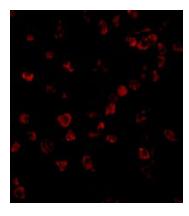
## **Images**



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



Immunocytochemistry of Ipaf in THP-1 cells with Ipaf antibody at 10  $\mu$ g/mL.



Immunofluorescence of Ipaf in THP1 cells with Ipaf antibody at 10  $\mu g/\text{mL}.$ 

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