

phospho-NLRC4(Ser-533) Antibody
Purified Rat Monoclonal Antibody
Catalog # AO2201a**Specification****phospho-NLRC4(Ser-533) Antibody - Product Information**

Application	E, WB, IF
Primary Accession	Q3UP24
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	116.7kDa KDa

Description

NLRC4 is a cytosolic NOD (nucleotide binding and oligomerization domain)-like receptor (NLR) that can trigger inflammasome formation in response to bacterial flagellin, an immunodominant antigen in the intestine.

Immunogen

Synthesized peptide of mouse phospho-NLRC4(Ser-533) (AA: 525-538) expressed in E. Coli.

Formulation

Purified antibody in PBS with 0.05% sodium azide

phospho-NLRC4(Ser-533) Antibody - Additional Information

Gene ID 268973

Other Names

NLR family CARD domain-containing protein 4, Caspase recruitment domain-containing protein 12, Ice protease-activating factor, Ipaf, Nlr4, Card12, Ipaf

Dilution

E~~1/10000
WB~~1/500 - 1/2000
IF~~1/200 - 1/1000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

phospho-NLRC4(Ser-533) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

phospho-NLRC4(Ser-533) Antibody - Protein Information

Name Nlrc4

Synonyms Card12, Ipaf

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. The NLRC4 inflammasome is activated as part of the innate immune response to a range of intracellular bacteria. It senses pathogenic proteins of the type III secretion system (T3SS) and type IV secretion system (T4SS) such as flagellin and PrgJ-like rod proteins via the Naip proteins (Naip1, Naip2 or Naip5): specific Naip proteins recognize and bind pathogenic proteins, driving assembly and activation of the NLRC4 inflammasome. The NLRC4 inflammasome senses Gram-negative bacteria such as *L.pneumophila* and *P.aeruginosa*, enteric pathogens *S.typhimurium* (*Salmonella*) and *S.flexneri* and fungal pathogen *C.albicans*. In intestine, the NLRC4 inflammasome is able to discriminate between commensal and pathogenic bacteria and specifically drives production of interleukin-1 beta (IL1B) in response to infection by *Salmonella* or *P.aeruginosa*. In case of *L.pneumophila* infection the inflammasome acts by activating caspase-7.

Cellular Location

Cytoplasm, cytosol. Inflammasome

Tissue Location

Expressed by intestinal mononuclear phagocytes.

phospho-NLRC4(Ser-533) 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](#)