10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

phospho-NLRC4(Ser-533) Antibody

Purified Rat Monoclonal Antibody
Catalog # AO2202a

Specification

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

Application	**E, IF, FC**
Primary Accession	Q3UP24
Reactivity	**Human**
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, Nlrc4, Card12, Ipaf

Dilution
E~~1/10000
IF~~1/200 - 1/1000
FC~~1/200 - 1/400

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

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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 Cytomety
- Cell Culture