10320 Camino Santa Fe, Suite G
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# phospho-NLRC4(Ser-533) Antibody
**Purified Rat Monoclonal Antibody**
**Catalog # AO2201a**

## Specification

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

| | |
|---|---|
| Application | **WB, ICC, E** |
| 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, Nlrc4, Card12, Ipaf

**Dilution**
WB~~1/500 - 1/2000
ICC~~N/A
E~~1/10000

**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

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**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