

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Mouse                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects mouse TLR1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 30% cross-reactivity with recombinant mouse (rm) TLR6 is observed, 5% cross-reactivity with recombinant human (rh) TLR1 and rmTLR2                                 |
| <b>Source</b>             | Polyclonal Goat IgG                                                                                                                                                                                                                                                         |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant mouse TLR1<br>Ser25-Asp581<br>Accession # Q9EPQ1                                                                                                                                                                            |
| <b>Conjugate</b>          | Alexa Fluor 350<br>Excitation Wavelength: 346 nm<br>Emission Wavelength: 442 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

|                       |                                                                        |
|-----------------------|------------------------------------------------------------------------|
| <b>CyTOF-ready</b>    | Optimal dilution of this antibody should be experimentally determined. |
| <b>Western Blot</b>   | Optimal dilution of this antibody should be experimentally determined. |
| <b>Flow Cytometry</b> | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

The Toll-like family of molecules are type I transmembrane proteins that serve as pattern recognition receptors for microbial pathogens. There are at least twelve mouse and ten human TLRs that activate the innate immune system following exposure to a variety of microbial species (1, 2). TLRs contain a large number of leucine-rich repeats (LRRs) and a cytoplasmic tail with one Toll/IL-1 receptor (TIR) domain. Mature mouse TLR1 consists of a 557 amino acid (aa) extracellular domain (ECD) with 20 LRRs, a 21 aa transmembrane segment, and a 192 aa cytoplasmic domain (3, 4). Within the ECD, mouse TLR1 shares 60% aa sequence identity with mouse TLR6 and 19%-27% aa sequence identity with mouse TLR2, -3, -4, -5, -7, -8, -9, -11, -12, and -13. It shares 73% and 86% aa sequence identity with human and rat TLR1, respectively. TLR1 is expressed on the surface of macrophages, dendritic cells, and tonsillar epithelial cells in ligand-independent association with TLR2 (5-8). TLR2 additionally associates with TLR6 to form a functional complex with specificity for distinct but related microbial ligands (9-11). TLR1 and TLR2 cooperate in the recognition of bacterial and protozoal triacylated lipopeptides and glycosylphosphatidylinositols (6, 10-12). Ligand binding induces TLR1 localization to lipid rafts followed by receptor internalization and activation of NFκB (7, 11, 13).

## PRODUCT SPECIFIC NOTICES

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