

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Mouse                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects mouse TLR6 in direct ELISAs and Western blots. In direct ELISAs, approximately 30% cross-reactivity with recombinant mouse (rm) TLR1 is observed and less than 1% cross-reactivity with rmTLR2, recombinant human (rh) TLR3 and rhT                                 |
| <b>Source</b>             | Polyclonal Goat IgG                                                                                                                                                                                                                                                         |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant mouse TLR6<br>Leu43-Asp594<br>Accession # BAA78632                                                                                                                                                                          |
| <b>Conjugate</b>          | Alexa Fluor 488<br>Excitation Wavelength: 488 nm<br>Emission Wavelength: 515-545 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.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** 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 a group of integral membrane proteins that serve as pattern recognition receptors for microbial pathogens. There are at least eleven mouse and ten human members that activate the innate immune system following exposure to a variety of microbial species (1-4). All Toll-like receptors (TLRs) are type I transmembrane (TM) proteins that exist either in the plasma membrane or in the membranes of endosomal structures (where they bind intracellular microbial nucleic acids). All TLRs also contain a large number of extracellular leucine-rich repeats (LRRs) and a cytoplasmic tail with a Toll/IL-1 receptor (TIR) domain. The mouse TLR6 cDNA encodes a 795 amino acid (aa) precursor that includes a 27 aa signal sequence, a 557 aa extracellular domain (ECD), a 21 aa transmembrane segment, and a 190 aa cytoplasmic domain. The ECD contains 14 Leu-rich repeats, and the cytoplasmic region contains one TIR domain (5). Within the ECD, mouse TLR6 shares 59% aa sequence identity with mouse TLR1 and 20-27% aa sequence identity with mouse TLR2, -3, -4, -5, -7, -8, -9, -11, -12, and -13. It shares 71%, 72%, and 86% aa sequence identity with bovine, human, and rat TLR6, respectively. TLR6 is expressed on the cell surface of macrophages, monocytes, neutrophils, and dermal endothelial cells in ligand-independent association with TLR2 (6-9). TLR2 also associates with TLR1, a functional complex with specificity for distinct but related microbial ligands (6-8). TLR6 and TLR2 cooperate in the recognition of acylated bacterial and mycoplasma lipopeptides, peptidoglycan, and glycosylphosphatidylinositols (7-14). The cytoplasmic TIR domain is necessary and sufficient to initiate signal transduction which leads to activation of NFκB (7, 15).

## PRODUCT SPECIFIC NOTICES

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