

## DESCRIPTION

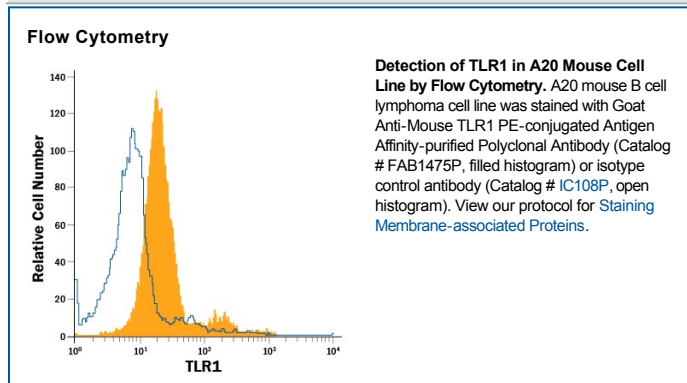
<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse TLR1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 30% cross-reactivity with recombinant mouse (rm) TLR6 is observed, 5% cross-reactivity with recombinant human (rh) TLR1 and rmTLR2 is observed, and less than 2% cross-reactivity with rhTLR3 and rhTLR4 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse TLR1 Ser25-Asp581 Accession # Q9EPQ1
<b>Conjugate</b>	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
<b>Formulation</b>	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.  *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>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	10 $\mu$ L/10 <sup>6</sup> cells	See Below

## DATA



## 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>	<b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul>

## 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).

## References:

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