Mouse TLR1 Biotinylated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: BAF1475

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse TLR1 in Western blots. In Western blots, approximately 40% cross-reactivity with recombinant mouse (rm) TLR6 is observed, 5% cross-reactivity with recombinant human TLR1 and rmTLR2 is observed, and less than 2% cross-reactivity with rhTLR3 and rhTLR4 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse TLR1 Ser25-Asp581 Accession # Q9EPQ1
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

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.*

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Mouse TLR1 (Catalog # 1476-TR)
Flow Cytometry	2.5 µg/10^6 cells	Mouse whole blood

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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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