

## Mouse Anti-Human Toll-like Receptor 4 (TLR4)

Cat. No.	Form	Quantity
11010-01	Purified (UNLB) Antibody	0.1 mg

### DESCRIPTION

<b>Clone</b>	1E11
<b>Ig Isotype</b>	Mouse IgG <sub>2a</sub>
<b>Specificity</b>	Human Toll-like Receptor 4 (TLR4)

The Toll-like receptor (TLR) family is comprised of Type I transmembrane proteins characterized by an extracellular leucine-rich domain and a cytoplasmic tail that contains a conserved region call the Toll/IL-1 (TIR) domain. First discovered in *Drosophila*, TLRs recognize specific molecular patterns that are present in microbial components and respond to these components in order eliminate or limit invading microbes. To date, ten mammalian homologs of TLRs have been described. TLR4 is involved in the recognition of lipopolysaccharide (LPS), an abundant glycolipid of Gram-negative bacteria. Through its association with MD-2 and CD14, TLR4 recognizes and initiates multiple intracellular signaling events such as the activation of NF- $\kappa$ B leading to the ultimate synthesis and release of a number of proinflammatory mediators including interleukin-1 (IL-1), interleukin-6 (IL-6), interleukin-8 (IL-8) and tumor necrosis factor- $\alpha$  (TNF- $\alpha$ ). TLR4 has also been associated in the recognition of and lipocheic acid (LTA), Hsp60 and Hsp70.<sup>1-10</sup>

### RESEARCH APPLICATIONS

- Enzyme-Linked-Immunosorbent-Assay (ELISA)
- Flow Cytometry

### CHARACTERIZATION

To insure lot-to-lot consistency, each batch of product is tested by ELISA or Flow Cytometry to conform with the characteristics of a standard reference reagent.

### WORKING DILUTIONS

<b>ELISA:</b>	Purified antibody	1:2000-1:4,000
<b>Flow:</b>	Purified antibody	$\leq 3\mu\text{g}/10^6$ cells
<b>Other Applications:</b>	Since applications vary, you should determine the optimum working dilution of the product that is appropriate for your specific need.	

***For Research Use Only. Not for Diagnostic or Therapeutic Use.***

## HANDLING AND STORAGE

- The purified antibody (UNLB) is supplied as 0.1 mg purified immunoglobulin in 0.2 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C.
- Reagents are stable for the period shown on the label if stored as directed.

## REFERENCES

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