

# Product Information

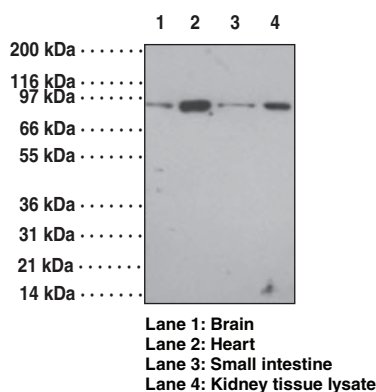


## Toll-Like Receptor 12 Polyclonal Antibody

Catalog No. 13586

- Contents:** This vial contains 100 µg of protein G-purified IgG in 200 µl PBS containing 0.2% gelatin and 0.05% sodium azide.
- Synonyms:** TLR12
- Antigen:** Synthetic peptide from murine TLR12 amino acids 743-756 (RVWLQGLRGKGDKG).
- Host:** Rabbit
- Cross Reactivity:** (+) Murine and rat TLR12
- Storage:** ≤6 months at 4°C; ≥6 months at -20°C
- Applications:** Western blot (WB) and flow cytometry (FC) (intracellular). The recommended starting dilution for WB is 0.5 µg/ml and FC (intracellular) is 5 µg/1x10<sup>6</sup> cells.

The toll-like receptors (TLRs) in mammals comprise a family of transmembrane proteins characterized by multiple copies of leucine rich repeats in the extracellular domain and an interleukin-1 (IL-1) receptor motif in the cytoplasmic domain. Like their counterparts in *Drosophila*, TLRs signal through adaptor molecules.<sup>1</sup> The TLR family is a phylogenetically conserved mediator of innate immunity that is essential for microbial recognition.<sup>2</sup> Most mammalian species have between ten and fifteen types of TLRs. Ten functional TLRs (TLR1-10) have been identified in human. Humans also encode a TLR11 gene but it contains several stop codons and protein is not expressed. However, murine and rat TLR11 are functional, and it is thought that human TLR11 function was lost during evolution. Historically speaking, TLR expression has been most extensively studied in the immune system. Overall, TLRs are highly expressed in immune competent cells, including macrophages, dendritic cells, neutrophils, mucosal epithelial cells and dermal endothelial cells. However, TLRs have also been identified in many other cell types and anatomical tissue locations where they are expressed either constitutively or induced during infection. TLR12 displays a distinct pattern of expression in macrophages, liver, kidney, and bladder epithelial cells. TLR12 does not respond to known TLR ligands.



### References

1. Srivastava, M.D., Srivastava, B.I.S. Expression of mRNA and proteins for toll-like receptors, associated molecules, defensins and LL-37 by SRIK-NKL, and CD<sup>8</sup> NK/T cell line. *Leukemia Research* **29**(7), 813-820 (2005).
2. Gibson, F.C., Hong, C., Chou, H.-H., *et al.* Innate immune recognition of invasive bacteria accelerates atherosclerosis in apolipoprotein E-deficient mice. *Circulation* **109**, 2801-2806 (2004).

### Related Products

Toll-Like Receptor 1 Polyclonal Antibody - Cat. No. 13582 • Toll-Like Receptor 2 Monoclonal Antibody (Clone TL2.1) - Cat. No. 13587 • Toll-Like Receptor 3 Monoclonal Antibody (Clone 40C1285.6) - Cat. No. 13588 • Toll-Like Receptor 4 Monoclonal Antibody (Clone HTA125) - Cat. No. 13589 • Toll-Like Receptor 5 Monoclonal Antibody (Clone 85B152.5) - Cat. No. 13595 • Toll-Like Receptor 5 Polyclonal Antibody - Cat. No. 13590 • Toll-Like Receptor 7 Monoclonal Antibody - Cat. No. 13591 • Toll-Like Receptor 8 Monoclonal Antibody (Clone 44C143) - Cat. No. 13592 • Toll-Like Receptor 9 Monoclonal Antibody (Clone 26C593.2) - Cat. No. 13593 • Toll-Like Receptor 10 Monoclonal Antibody (Clone 158C1114) - Cat. No. 13584 • Toll-Like Receptor 11 Polyclonal Antibody - Cat. No. 13585

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**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY; NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

#### MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

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