

Product Information

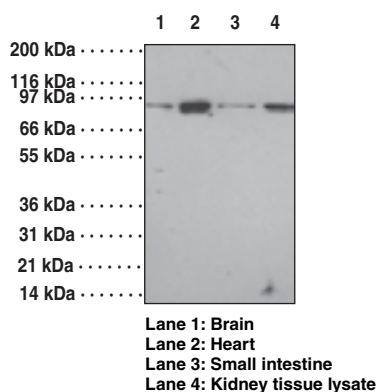


Toll-Like Receptor 12 Polyclonal Antibody

Item 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.
Synonym:	TLR12
Antigen:	Synthetic peptide from mouse TLR12 amino acids 743-756 (RVWLQGLRGKGDKG).
Host:	Rabbit
Cross Reactivity:	(+) Mouse 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 ⁶ 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.¹ The TLR family is a phylogenetically conserved mediator of innate immunity that is essential for microbial recognition.² 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, mouse 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 CD⁸ 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

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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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