

Product Information

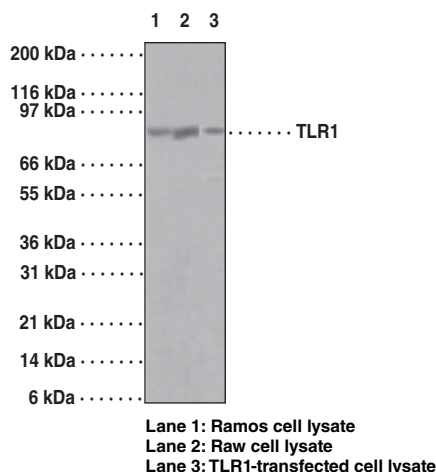


Toll-Like Receptor 1 Polyclonal Antibody

Item No. 13582

Contents:	This vial contains 0.1 mg of protein G-purified IgG in 0.2 ml PBS containing 0.05% BSA and 0.05% sodium azide.
Synonyms:	TLR1
Antigen:	Synthetic peptide from human TLR1 within the region of amino acids 400-450
Host:	Rabbit
Cross Reactivity:	(+) Human, mouse, and rat TLR1
Storage:	≤6 months at 4°C; ≥6 months at -20°C
Applications:	The recommended starting concentration for western blot is 1-3 µg/ml and 0.5-1 µg/10 ⁶ cells for flow cytometry (intracellular and cell surface).

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. TLR2 is differentially expressed in human cells. 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. In mice, TLR1 interacts with TLR2 and coexpression of TLR1 and TLR2 enhances the NF-κB activation in response to a synthetic lipopeptide. Together, they recognize the lipid configuration of the native mycobacterial lipoprotein as well as several triacylated lipopeptides.



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

For a list of related products please visit: www.caymanchem.com/catalog/13582

Cayman Chemical

Mailing address

1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone

(800) 364-9897
(734) 971-3335

Fax

(734) 971-3640

E-Mail

custserv@caymanchem.com

Web

www.caymanchem.com

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.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery**.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our **Warranty and Limitation of Remedy** located on our website and in our catalog.

Copyright Cayman Chemical Company, 12/08/2011