Mouse TLR12 PE-conjugated Antibody

Recombinant Monoclonal Rabbit IgG Clone # 1229C
Catalog Number: IC8086P
25 TESTS

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse TLR12 in direct ELISAs.
Source	Recombinant Monoclonal Rabbit IgG Clone # 1229C
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse TLR12 Thr22-Lys709 Accession # Q6QNU9
Conjugate	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

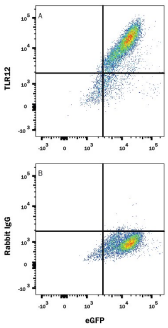
APPLICATIONS

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
Intracellular Staining by Flow Cytometry	10 µL/10^6 cells	See Below

DATA

Intracellular Staining by Flow Cytometry



Detection of TLR12 in HEK293 Human Cell Line Transfected with Mouse TLR12 and eGFP by Flow Cytometry. HEK293 human embryonic kidney cell line transfected with mouse TLR12 and eGFP was stained with either (A) Rabbit Anti-Mouse TLR12 PE-conjugated Monoclonal Antibody (Catalog # IC8086P) or (B) Normal Rabbit IgG Phycoerythrin Control (Catalog # IC105P). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005). View our protocol for Staining Intracellular Molecules.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Protect from light. Do not freeze.** • 12 months from date of receipt, 2 to 8 °C as supplied.

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BACKGROUND

Toll-like receptors (TLRs) are type I transmembrane proteins that activate the immune system in response to molecular patterns derived from microbial pathogens. Some TLRs are expressed on the cell surface (TLR1, 2, 4, 5, 6, 10), while others are found in endosomal structures (TLR3, 7, 8, 9, 11, 12, 13). TLRs contain a large number of leucine-rich repeats (LRRs) in their ectodomains and a cytoplasmic tail with one signal transducing Toll/IL-1 receptor (TIR) domain (1, 2). Mature mouse TLR12 is an approximately 100 kDa glycoprotein that belongs to the TLR11 family of TLRs. It consists of a 688 amino acid (aa) ectodomain with 17 LRRs, a 21 aa transmembrane segment, and a 176 aa cytoplasmic region (3). Over aa21-709, mouse TLR12 shares 80% aa sequence identity with rat TLR12. There is no human counterpart. TLR12 is expressed in dendritic cells, macrophages, and neurons, and in the uterus, liver, kidney, and bladder (3-6). It is up-regulated in the adipose tissue of obesity-prone ob/ob mice fed a high fat diet (7). The intracellular trafficking and sorting of several TLRs (including TLR12) is dependent on the endoplasmic reticulum resident protein UNC93B1 (8, 9). TLR12 can associate into homodimers as well as heterodimers with TLR11 (4). TLR11 can additionally heterodimerize with TLR3 and TLR7 (4, 8). TLR12 is required for the inflammatory response against uropathogenic bacteria and *Toxoplasma gondii* (3, 4). It directly binds Profilin from *T. gondii*, and it cooperates with TLR11 in protecting against *T. gondii* infection *in vivo* (4).

References:

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