

Product datasheet for **SM1825BS**

TLR2 Mouse Monoclonal Antibody [Clone ID: TL2.1]

Product data:

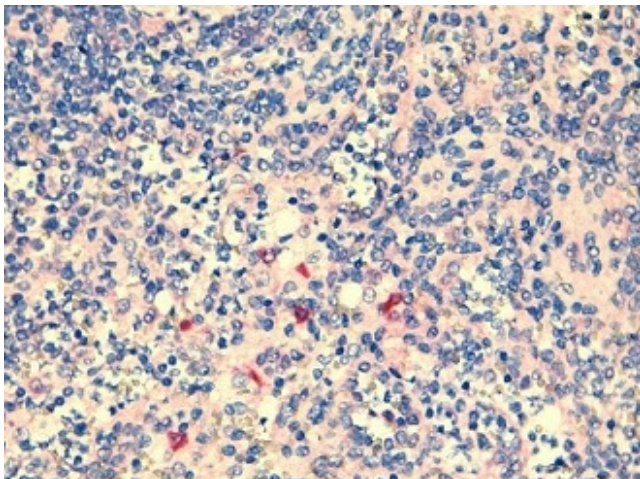
Product Type:	Primary Antibodies
Clone Name:	TL2.1
Applications:	FC, IF, IHC, WB
Recommended Dilution:	<p>Immunohistochemistry on frozen sections (2): Fixed in acetone; 3 % H₂O₂ for blockade of endogenous peroxidases; human tonsils as positive control (useful, but clone TL2.3 is preferred; Ref 2). The typical starting working dilution is 1:50.</p> <p>Immunohistochemistry on paraffin sections (4): HOPE-fixed; alveolar epithelial cells type II in human lung as positive control; 1 µg/ml antibody for 16 hr at 4 °C (Ref 4). The typical starting working dilution is 1:50.</p> <p>Flow cytometry (2,5): 2 µg antibody per 300000 cells; untreated as well as 0.4 % formaldehyde fixed cells can be used; do not permeabilize the cells or use 4 % paraformaldehyde as fixative! (Ref 5). The typical starting working dilution is 1:50.</p> <p>Functional assays (1): 1 µg/5x10⁷ cells; antibody blocks TNFα release (induced by bacteria) from peripheral blood mononuclear cells (Ref 1).</p> <p>Immunofluorescence (2,3): HMECs were fixed with 4% paraformaldehyde in PBS, permeabilized and blocked before staining; antibody concentration used 5-10 µg/ml.</p> <p>Immunoprecipitation (2): Lysed monocytes were immunoprecipitated with antibody-conjugated Sepharose; size ~90 kDa (Ref 2).</p> <p>Western blot (3): Peripheral blood mononuclear cells; non-reduced; 1 µg/ml antibody; size ~90 kDa. The typical starting working dilution is 1:50.</p> <p>Positive control: Peripheral blood mononuclear cells, granulocytes and monocytes.</p>
Reactivity:	Canine, Human, Monkey
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Recombinant human TLR2 produced by the CHO/CD14 reporter cell line
Specificity:	The monoclonal antibody TL2.1 recognizes human Toll-like receptor 2 (TLR2, CD282).



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Formulation:	PBS Label: Biotin State: Liquid 0.2 µm filtered Ig fraction Stabilizer: 0.1% bovine serum albumin Preservative: 0.02% sodium azide
Concentration:	lot specific
Purification:	Protein G
Conjugation:	Biotin
Storage:	Store at 2 - 8 °C.
Stability:	Shelf life: one year from despatch.
Gene Name:	toll like receptor 2
Database Link:	Entrez Gene 7097 Human O60603
Background:	<p>Toll-like receptors (TLR) are highly conserved throughout evolution and are involved in the innate defence to many pathogens. In Drosophila toll is required for the anti-fungal response, while the related 18-wheeler is involved in antibacterial defences. In mammals, TLRs are identified as type I transmembrane signaling receptors with pattern recognition capabilities. They have been implicated in the innate host defence to pathogens. TLR2 is expressed on macrophages, smooth muscle, lung, spleen, thymus, brain and adipose tissue.</p> <p>TLR2 has been identified as a receptor that is central to the innate immune response to lipoproteins of Gram-negative bacteria, several whole Gram-positive bacteria, as well as a receptor for peptidoglycan and lipoteichoic acid and other bacterial cell membrane products. A functional interaction between TLR2 and TLR6 in the cellular response to various bacterial products has been discovered. TLR2 cooperates with LY96 to mediate the innate immune response to bacterial lipoproteins and other microbial cell wall components. It cooperates with TLR1 to mediate the innate immune response to bacterial lipoproteins or lipopeptides. It acts via MYD88 and TRAF6, leading to NF-κ-B activation, cytokine secretion and the inflammatory response. TLR2 also promotes apoptosis in response to lipoproteins. Bacterial species as diverse as mycobacteria, spirochetes, mycoplasma, S. aureus, B. burgdorferi, T. pallidum, M. fermentans and Streptococcus pneumoniae have all been shown to mediate cellular activation via TLR2.</p>
Synonyms:	Toll-like receptor 2

Product images:



TLR2 staining in human spleen by using mAb TL2.1 (10ug/ml).