

Product datasheet MON4030

MONOSAN[®]

Mouse anti-TLR2, clone TL2.1 (Monoclonal)

Clone no. TL2.1

MONOSAN

Product name	Mouse anti-TLR2, clone TL2.1 (Monoclonal)
Host	Mouse
Applications	IHC-fr,FC,FUNC,IF,IP,IHC-P,WB
Species reactivity	human, canine, cynomolgus monkey, rhesus monkey
Conjugate	-
Immunogen	Unknown or proprietary to MONOSAN and/or its suppliers
Isotype	IgG2a
Clonality	Monoclonal
Clone number	TL2.1
Size	1 ml
Concentration	100 ug/ ml
Format	-
Storage buffer	PBS with 0.1% BSA and 0.02% sodium azide
Storage until expiry date	2-8°C

FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES

Mouse anti-TLR2, clone TL2.1 (Monoclonal)

Clone no. TL2.1

MONOSAN

Additional info

The monoclonal antibody TL2.1 recognizes human Toll-like receptor 2 (TLR2, CD282). 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.

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.

The monoclonal antibody TL2.1 is a TLR2 function blocking antibody that is useful for studies on the role of TLR2 as a pattern recognition receptor in microbial products induced cytokine production by TLR2 bearing cells such as human peripheral blood mononuclear cells

References

1. Lien; E et al. J Biol Chem 1999; 274: 33419
2. Flo, T et al J Leukoc Biol 2001, 69: 474
3. Faure; E et al. J Immunol 2001; 166: 2018
4. Droemann D et al. Histochem Cell Biol 2003; 119: 103
5. Burgener I et al. Vet Immunol Immunopathol 2008; 124: 184

FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES