9853 Pacific Heights Blvd.
Suite D. San Diego,
CA 92121, USA
Tel: 858-263-4982
Email: info@abeomics.com

10-3506: Monoclonal Antibody to Human/ Mouse TLR2 (Clone : T2.5)(Discontinued)

Clonality :	Monoclonal
Clone Name :	T2.5
Application :	Functional Assay,IP,IHC,FACS
Reactivity :	Mouse,Human
Gene :	Tlr2
Gene ID :	24088
Uniprot ID :	Q9QUN7
Format :	Purified
Alternative Name :	TLR2, CD282, TIL4
Isotype :	Mouse IgG1
Immunogen Information :	Mouse TLR2 peptide

Description

The monoclonal antibody 10-3506 recognizes human Toll-like receptor 2 (TLR2). Toll-like receptors (TLR) are highly conserved throughout evolution and have been implicated in the innate defense to many pathogens. At present, ligands for several of the TLR's, such as TLR2-6,9, have been identified, confirming their role in first line defense against invading microorganism. In mammals, TLRs are identified as type I transmembrane signaling receptors with an extracellular portion containing leucine-rich repeats with pattern recognition capabilities. Pathogen recognition by TLRs provokes rapid activation of innate immunity by inducing proliferation of proinflammatory cytokines and upregulation of costimulatory molecules and eventually toinitiation of adaptive immunity. 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. It is suggested that TLR2 is able to recognize such a wide variety of PAMPs (pathogen-specific molecular patterns) by forming heterodimers with other TLRs like e.g. TLR6. TLR2 is essential for recognizing lipopeptides and lipoproteins from several microorganisms and also peptidoglycans derived from gram-positive bacteria. Bacterial species as diverse as mycobacteria, spirochetes, mycoplasma, Staphylococcus aureus, and Streptococcus pneumoniae have all been shown to mediate cellular activation via TLR2.

Product Info

Amount :	Monoclonal Antibody to Human/ Mouse TLR2 (Clone : T2.5)(Discontinued) / 500 µg
Content :	0.5 mg, 0.2 µm filtered antibody solution in PBS containing 0.1% BSA
Storage condition :	Product should be stored at 4 °C. Under recommended storage conditions, product is stable for one year.

Application Note

IHC-F: 6 µm sections were fixed with aceton. Sections were blocked with goat serum and exposed o/n with T2.5.

FC: 4x10^4 leukocytes/ml were stained for 30 minutes at 4 °C.

Functional assay: mice were injected i.p. with 1 mg T2.5, after 1h incubation mice were challenged;T2.5 5 µg/ml was added to cell culture.

IP: 40 µg cleared protein was incubated with 2 µg T2.5 for 1h at 4 °C. IA: T2.5 as a detector.

9853 Pacific Heights Blvd.
Suite D. San Diego,
CA 92121, USA
Tel: 858-263-4982
Email: info@abeomics.com

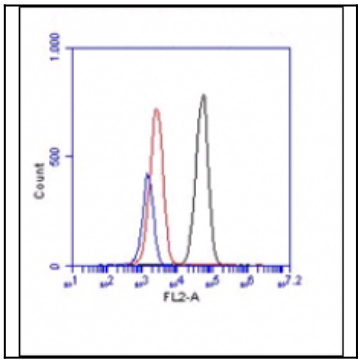

Figure-1:Flow analysis of human/mouse TLR2 antibody (Clone:T2.5): Cell surface staining of Raw cells, blue represents TLR2, red represents Isotope control mouse IgG1. 2 µg antibody was used for staining. Goat Anti-mouse PE was used as secondary antibody.

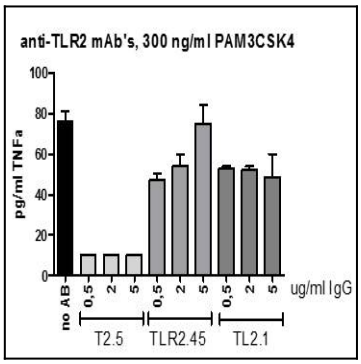

Figure-2: Functional study experiment is showing the effect of anti-TLR2 antibodies on TNF production in whole blood model upon treatment with PAM3CSK4 at 300 ng/ml.

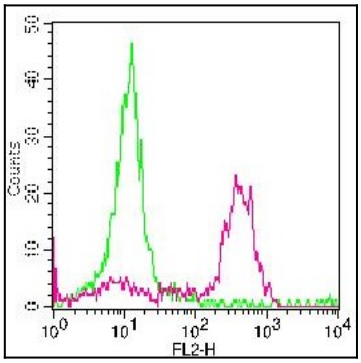

Figure-3: Flow analysis of human/mouse TLR2 antibody (Clone:T2.5): Cell surface staining of PBMC, Granulocytes gated. Red represents TLR2, green represents Isotope control mouse IgG1(ABEOMICS). 0.5 µg antibody was used for staining. Goat Anti-mouse PE was used as secondary antibody.