

## **CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

## TLR2, Human, clone TL2.3, FITC conjugated Product name Catalog number HM2066F-20UG Lot number Expiry date 200 µl Volume Amount 20 µg Formulation 0.2 µm filtered in PBS+1%BSA+0.02%NaN3 Concentration 100 µg/ml **Host Species** Mouse IgG2a Conjugate FITC Endotoxin ΝA Purification Protein G 4°C Storage

## **Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #	1,7			4	2-4	6		7
Yes	•		•	•	•	•		•
No		•						
N.D.							•	

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot



FC: Flow cytometry with THP-1 cells. The black line represents cells only, the red line the isotype control and the blue line antibody TL2.3 (2  $\mu$ g/250000 cells).

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

FS: The monoclonal antibody TL2.3 can be used for stimulation of T cells.

## **General Information**

Description Toll-like receptors (TLR) are highly conserved throughout evolution and have been implicated in the innate defense to many pathogens. In Drosophila, toll is required for the anti-fungal response, while the related 18-wheeler is involved in antibacterial defenses. In mammals, TLR identified as type I transmembrane signaling receptors with pattern recognition capabilities, have been implicated in the innate host defense to pathogens. TLR2 has been identified as a receptor that is central to the innate immune response to lipoproteins of Gram-negative bacteria, several whole Grampositive 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. The currently accepted paradigm regards TLR2 as an essential receptor for many eubacterial cell wall components, including lipoproteins and peptidoglycan. Bacterial species as diverse as mycobacteria, spirochetes, mycoplasma, Staphylococcus aureus, and Streptococcus pneumoniae have all been shown to mediate cellular activation via TLR2 (CD282). The FITC conjugated monoclonal antibody TL2.3 is specific for human TLR2 (CD282). TL2.3 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. The human Toll-like receptor 2 (TLR2) is Patent protected by US Patent no. US 7,071,310. License rights on the Patent are acquired from Leiv

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Immunogen	Human TLR2-expressing CHO cells					
Aliases	CD282, TIL4, Toll-like receptor 2					
Gene	Gene name: TLR2, TIL4					
Cross reactivity	Canine: Yes.					
References	<ol> <li>Flo, T et al; Differential expression of Toll-like receptor 2 in human cells. J Leukoc Biol 2001, <i>69</i>: 474</li> <li>Schjetne, K et al; Link between innate and adaptive immunity: Toll-like receptor 2 internalizes antigen for presentation to CD4+ T cells and could be an efficient vaccine target. J Immunol 2003, <i>171</i>: 32</li> <li>Siedlar, M et al; Tolerance induced by the lipopeptide Pam3Cys is due to ablation of IL-1R-associated kinase 1. J Immunol 2004, <i>173</i>: 2736</li> <li>Tunheim, G et al; Human receptors of innate immunity (CD14, TLR2) are promising targets for novel recombinant immunoglobulin-based vaccine candidates. Vaccine 2007, <i>25</i>: 4723</li> <li>Burgener, I et al; Antibodies specific for human or murine Toll-like receptors detect canine leukocytes by flow cytometry. Vet Immunol Immunopathol 2008, <i>124</i>; 184</li> <li>Stribos, E et al; Renal expression of Toll-like receptor 2 and 4: Dynamics in human allograft injury and comparison to rodents. Molecular Immunology 2015, <i>64</i>: 82</li> </ol>					
Storage&stability	Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.					
Precautions	For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.					

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC Brenda Teunissen

Date 16/11/2020

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.