

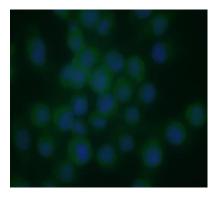
## **CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

Product name	TLR2, Mouse, clone 6C2		
Catalog number	HM1047-100UG		
Lot number	-	Expiry date	-
Volume	1 ml	Amount	100 µg
Formulation	0.2 $\mu m$ filtered in PBS+0.1%BSA+0.02%NaN3	Concentration	100 µg/ml
Host Species	Rat IgG2b	Conjugate	None
Endotoxin	N.A.	Purification	Protein G
Storage	4°C		

## **Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #	4			1,2,3			1	
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



IF: Immunofluoresce with HM1047F. The concentration used was 2  $\mu g/ml$  and cells are RAW 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.

- FC: Antibody 6C2 stains the intracellular domain of mouse TLR2. For intracellular staining cells were permeabilized with buffer containing 0.5% saponin in PBS-1% FCS. The cells were fixed in 2% paraformaldehyde before staining. (Ref.1)
- IF: RAW cells were fixed in in 1% paraformaldehyde/PBS for 30 minutes at R.T. and blocked with PBS/3% BSA solution for 30 minutes. HM1047 was incubated overnight.
- IHC-F: Frozen kidney sections were dried by airflow, fixed in cold acetone and blocked with 0.09% H2O2 in PBS.

## General Information

Description	Monoclonal antibody 6C2 reacts with mouse Toll-like receptor 2 (TLR2, CD282). 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 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. 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.

Immunogen CHO/moTLR2 cells (Ref.1)

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Aliases	TLR2, CD282			
Gene	Gene name: Tlr2			
Cross reactivity	Human TLR2: No (Ref.1)			
References	<ol> <li>Nilsen, N et al; Lipopolysaccharide and Double-stranded RNA Up-regulate Toll-like Receptor 2 Independently of Myeloid Differentiation Factor 88. J Biol Chem 2004, <i>279</i>: 39727</li> <li>Rharbaoui, F et al; The mycoplasma-derived macrophage-activating 2-kilodalton lipopeptide triggers global immune activation on nasal mucosa-associated lymphoid tissues. Infect Immun 2004, <i>72</i>: 6978</li> <li>Lan, J et al; Different cytokine response of primary colonic epithelial cells to commensal bacteria. World J Gastoenterol 2005, <i>11</i>:3375</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	Date
Brenda Teunissen	12/11/2019

Do you have any questions or comments regarding this product? Please contact us via <a href="mailto:support@hycultbiotech.com">support@hycultbiotech.com</a>.

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