CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	TLR2, Mouse, clone mT2.4		
Catalog number	HM1092-20UG		
Lot number	-	**Expiry date**	-
Volume	200 µl	**Amount**	20 µg
Formulation	0.2 µm filtered in PBS+0.1%BSA	**Concentration**	100 µg/ml
Host Species	Mouse IgG2b	**Conjugate**	None
Endotoxin	<24 EU/mg	**Purification**	Protein G
Storage	4°C		

Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								
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

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: mT2.4 inhibits murine TLR2-mediated cell activation. For inhibition of biological activity T2.5 (HM1054) is a stronger antagonistic antibody. For neutralization of biological activity in vitro dilutions have to be made according to the amounts of TLR2 (CD282) to be inactivated.

General Information

Description

Monoclonal antibody mT2.4 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.
The monoclonal antibody mT2.4 inhibits murine TLR2-mediated cell activation. It masks the lipopeptide binding site in the recombinant extracellular domain of TLR2 (TLR2ECD) and does not hinder the receptor complex formation. The antibody reacts with the native TLR2 protein and not with denatured TLR2 protein . Furthermore the antibody stains overexpressed, as well as endogenous cell surface- and intracellular mouse TLR2.

References

1. Meng, G et al; Murine TLR2 expression analysis and systemic antagonism by usage of specific monoclonal antibodies. Immunology Letters 2005, *98*: 200
2. 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, *64*: 82

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	11/11/2020

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