

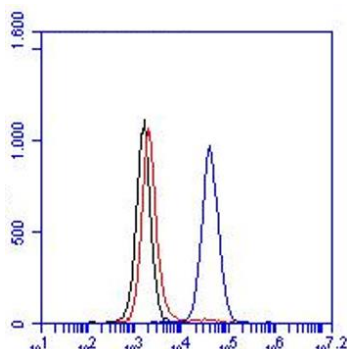
CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	TNF-RII, Human, clone 80M2		
Catalog number	HM2022-500UG		
Lot number	-	Expiry date	-
Volume	-	Amount	500 µg
Formulation	0.2 µm filtered in PBS	Concentration	>0.5 mg/ml
Host Species	Mouse IgG1	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 #			2	2	1,2,4,5		3	
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 80M2 in a concentration of 2µg/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.

- FC: Antibody 80M2 was used to select HeLa cells expressing TNF-RII by FACS. As negative control mock transfected HeLa cells were used. (Ref.2).
- FS: Antibody 80M2 functions as an allosteric modulator, which stabilizes the ligand-receptor complex. (Ref.1).
- Positive control: HeLa cells transfected with TNF-RII; Negative control: Mock transfected HeLa cells.

General Information
Description

The monoclonal antibody 80M2 recognizes the extracellular part of membrane-bound TNF-RII as well as the soluble form of TNF-RII which is generated by proteolytic cleavage of the extracellular domain. The soluble form can still bind TNF-alpha with high affinity and functions as a TNF-alpha antagonist. TNF-alpha is an important signaling protein in the immune system which can activate inflammatory responses, induce apoptosis, regulate cellular proliferation, and may even promote cancer progression. TNF-alpha can bind to two structurally distinct membrane receptors, TNF-R1 and TNF-RII, which have both distinct and overlapping downstream signaling cascades. TNFR1 is believed to be expressed on nearly all cell types, whereas TNFR2 exhibits more restricted expression, being found on certain subpopulations of immune cells and several other cell types. A dominant role of TNF-RII has been shown in thymocyte activation by TNF-alpha, whereas induction of cytotoxicity and other functions are mediated largely by TNF-R1. TNF-R1 is equally well activated by both the 17 kDa soluble and 26 kDa membrane-bound form, whereas TNF-RII is activated only by the membrane bound form of TNF-alpha. The antibody is a non-agonistic receptor modulating antibody. It enhances in vitro TNF alpha responses by increasing the affinity of the soluble form of TNF-alpha for TNF-RII.

Aliases	Tumor necrosis factor receptor superfamily member 1B, Tumor necrosis factor receptor 2, CD120b, TNF-R2, p75, p80, Tumor necrosis factor receptor type II, TNF-alpha receptor
Gene	Gene name: TNFRSF1B, TNFBR, TNFR2
Cross reactivity	Rat: Yes.
References	<ol style="list-style-type: none"> 1. Grell, M et al; The transmembrane form of tumor necrosis factor is the prime activating ligand of the 80 kDa tumor necrosis factor receptor. <i>Cell</i> 1995, <i>83</i>: 793 2. Till, A et al; The Met 196 - Arg variation of human tumor necrosis factor receptor 2 (TNFR2) affects TNF-alpha induced apoptosis by impaired NF-kB signalling and target gene expression. <i>J Biol Chem</i> 2005, <i>280</i>: 5994 3. Scherubl C. et al; Colocalization of endogenous TNF with a functional intracellular splice form of human TNF receptor type 2. <i>Journal of Inflammation</i> 2005, <i>2</i>: 7 4. Krippner, A et al; Single chain TNF, a TNF derivative with enhanced stability and antitumoral activity. <i>J Immunol</i> 2008, <i>180</i>: 8176 5. Fairfax, B et al; A common haplotype of the TNF receptor 2 gene modulates endotoxin tolerance. <i>J. Immunol</i> 2011, <i>186</i>: 3058
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
05/11/2019

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