

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	TNF-RI, Mouse, clone HM104, FITC conjugated		
Catalog number	HM1009F-20UG		
Lot number	-	Expiry date	-
Volume	200 µl	Amount	20 µg
Formulation	0.2 µm filtered in PBS+0.02%NaN ₃ +1%BSA	Concentration	100 µg/ml
Host Species	Rat IgG2a	Conjugate	FITC
Endotoxin	N.A.	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.

General Information

Description The monoclonal antibody HM104 recognizes the extracellular part of the Tumor Necrosis Factor Receptor type I (TNF-RI) of the membrane-bound as well as the soluble receptor. TNF-RI (~55-60 kDa) is present on most cell types and is considered to play a prominent role in cell stimulation by TNF-alpha. TNF-alpha activates inflammatory responses, induces apoptosis, regulates cellular proliferation, and may even promote cancer progression. The effects of TNF-alpha are mediated by TNF-RI and TNF-RII, which have both distinct and overlapping downstream signaling cascades. Induction of cytotoxicity and other functions are mediated largely via TNF-RI. TNF-RI is equally well activated by both the 17 kDa soluble and 26 kDa membrane-bound form, whereas TNF-RII is efficiently activated only by the membrane bound form of TNF-alpha.

TNF-RI signaling is initiated when trimeric TNF-alpha binds TNF-RI receptors. Subsequent TNF-RI trimerization promotes the recruitment of a proximal signaling complex composed of TNF Receptor Associated protein with a Death Domain (TRADD), Receptor Interacting Protein (RIP), cellular Inhibitor of Apoptosis Protein 1 (cIAP1), TNF Receptor Associated Factor 2 (TRAF2), and likely TRAF5. Studies with TNF-RI-deficient mice indicate that TNF-RI mediates most of the proliferation, pro-inflammatory, and apoptosis-activating pathways.

Aliases CD120a, Tumor necrosis factor receptor superfamily member 1A, p55/p60, TNF-RI

- References**
1. Bigini, P et al; Immunohistochemical localization of TNF α and its receptors in the rodent central nervous system. *Methods Mol Med* 2004, 98: 73
 2. Mennini, T et al; Glial activation and TNFR-I upregulation precedes motor dysfunction in the spinal cord of mnd mice. *Cytokine* 2004, 25: 127
 3. Ghezzi, P et al; Tumor necrosis factor as a pharmacological target. *Methods Mol Med* 2004, 98: 1

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
26/10/2020

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