

**CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

<b>Product name</b>	TNF-RI, Mouse, pAb		
<b>Catalog number</b>	HP8002-20UG		
<b>Lot number</b>	-	<b>Expiry date</b>	-
<b>Volume</b>	200 µl	<b>Amount</b>	20 µg
<b>Formulation</b>	0.2 µm filtered in PBS+0.1%BSA	<b>Concentration</b>	100 µg/ml
<b>Host species</b>	Rabbit IgG	<b>Conjugate</b>	None
<b>Endotoxin</b>	<24 EU/mg	<b>Purification</b>	Protein A
<b>Storage</b>	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: For functional studies, *in vitro* dilutions have to be optimized in user's experimental setting. Antibody reactivity with cell bound or soluble TNF-RI is not inhibited by high concentrations of mouse TNF $\alpha$ . HP8002 is cross reactive with Mouse TNF-RII which is problematic in case of TNF-RI knockout studies and when used in high concentrations in functional studies.

**General Information**

<b>Description</b>	<p>The polyclonal antibody recognizes the extracellular part of the mouse Tumor Necrosis Factor Receptor type 1 (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.</p> <p>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.</p>
<b>Aliases</b>	Tumor necrosis factor receptor superfamily member 1A, TNF-RI, p55/p60, CD120a
<b>Cross reactivity</b>	Mouse TNF-RII: Yes; Mouse TNF-alpha: minimal
<b>References</b>	<ol style="list-style-type: none"> <li>Lucas, R et al; Both TNF receptors are required for direct TNF-mediated cytotoxicity in microvascular endothelial cells. <i>Eur J Immunol</i> 1998, <i>28</i>: 3577</li> <li>Bemelmans, M et al; LPS-Induced sTNF-receptor release in vivo in a murine model. <i>J Immunol</i> 1993, <i>151</i>: 5554</li> <li>Gerspach, J et al; Detection of membrane-bound tumor necrosis factor (TNF): an analysis of TNF-specific reagents. <i>Micr Res Tech</i> 2000, <i>50</i>: 243</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.

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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  
13/01/2021

Do you have any questions or comments regarding this product? Please contact us via [support@hycultbiotech.com](mailto:support@hycultbiotech.com).