

Datasheet: MCA1340PET

Description:	MOUSE ANTI HUMAN CD120a:RPE
Specificity:	CD120a
Other names:	TNF-R1
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	H398
Isotype:	lgG2a

## **Product Details**

RRID	AB_1100636

## **Applications** This product has been reported to work in the following applications. This information is derived

from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol

recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	-			Neat

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

Target Species							
Species Cross Reactivity	Reacts with: Rabbit <b>N.B.</b> Antibody reactivi	pecies.					
Product Form	Purified IgG conjugate	ed to R. Phycoerythrir	n (RPE) - lyophilized				
Reconstitution	Reconstitute with 0.25 ml distilled water						
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)				
	RPE 488nm laser	496	578				
Preparation	Purified IgG prepared	by affinity chromatog	raphy on Protein G from	tissue culture supernatant			
Buffer Solution	Phosphate buffered s						
Preservative	0.09% Sodium Azide	(NaN <sub>3</sub> )					
Stabilisers	sers 1% Bovine Serum Albumin						
	5% Sucrose						
Immunogen	Purified human tumou						

### External Database Links

**UniProt:** 

P19438 Related reagents

**Entrez Gene:** 

7132 TNFRSF1A Related reagents

#### **Synonyms**

TNFAR, TNFR1

#### **Fusion Partners**

Spleen cells from immunized BALB/c mice were fused with cells of the mouse NS0 myeloma cell line.

#### Specificity

**Mouse anti Human CD120a antibody, clone H398** recognizes an extracellular domain of the ~55 kDa human TNF receptor (p55, TNF-R1, CD120a). No binding occurs to the ~75 kDa TNF receptor (CD120b). CD120a is weakly expressed by monocytes and granulocytes.

Mouse anti Human CD120a antibody, clone H398 may be used to detect high levels of TNFR1, in western blotting under reducing conditions, such as recombinant material, but it is not suitable for detection of TNFR1 in normal cells in this application.

Mouse anti Human CD120a antibody, clone H398 inhibits the biological activity of both natural and recombinant human TNFalpha and TNFbeta (<u>Thoma et al. 1990</u> and <u>Dri et al. 1999</u>).

Mouse anti Human CD120a antibody, clone H398 is routinely tested in flow cytometry on human peripheral blood monocytes.

#### Flow Cytometry

Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells or 100ul whole blood

#### References

- 1. Thoma, B. *et al.* (1990) Identification of a 60-kD tumor necrosis factor (TNF) receptor as the major signal transducing component in TNF responses. J Exp Med. 172 (4): 1019-23.
- 2. Menegazzi, R. *et al.* (1994) Evidence that tumor necrosis factor alpha (TNF)-induced activation of neutrophil respiratory burst on biologic surfaces is mediated by the p55 TNF receptor. <u>Blood. 84</u> (1): 287-93.
- 3. Dri, P. *et al.* (1999) Role of the 75-kDa TNF receptor in TNF-induced activation of neutrophil respiratory burst. <u>J Immunol</u>. 162 (1): 460-6.
- 4. Kohrgruber, N. *et al.* (1999) Survival, maturation, and function of CD11c- and CD11c+ peripheral blood dendritic cells are differentially regulated by cytokines. <u>J Immunol</u>. 163 (6): 3250-9.
- 5. Weigert, N. *et al.* (1996) Gastrin secretion from primary cultures of rabbit antral G cells: stimulation by inflammatory cytokines. <u>Gastroenterology</u>. 110 (1): 147-54.
- 6. Kennedy, G. *et al.* (2010) Biochemical and vascular aspects of pediatric chronic fatigue syndrome. <u>Arch Pediatr Adolesc Med. 164 (9): 817-23.</u>
- 7. Gregory, A.P. *et al.* (2012) TNF receptor 1 genetic risk mirrors outcome of anti-TNF therapy in multiple sclerosis. <u>Nature</u>. 488 (7412): 508-11.
- 8. Schett, G. *et al.* (2003) TNFalpha mediates susceptibility to heat-induced apoptosis by protein phosphatase-mediated inhibition of the HSF1/hsp70 stress response. <u>Cell Death Differ. 10:</u> 1126-36.
- 9. Buckley, C.D. *et al.* (2005) Identification of a phenotypically and functionally distinct population of long-lived neutrophils in a model of reverse endothelial migration. <u>J Leukoc Biol.79</u>: 303-11.
- 10. Thiery, J. *et al.* (2003) Potentiation of a tumor cell susceptibility to autologous CTL killing by restoration of wild-type p53 function. J Immunol. 170: 5919-26.
- 11. Lin, K.H. *et al.* (2009) Mechanisms of resveratrol-induced platelet apoptosis. <u>Cardiovasc Res.</u> 83: 575-85.
- 12. Baker, P.K. et al. (2012) Response of hairy cells to IFN-alpha involves induction of apoptosis

through autocrine TNF-alpha and protection by adhesion. Blood. 100: 647-53. 13. Nakamura-Lopez, Y. et al. (2015) RSV P-protein impairs extrinsic apoptosis pathway in a macrophage-like cell line persistently infected with respiratory syncytial virus. Virus Res. 204: 82-7. Prior to reconstitution store at +4°C. **Storage** After reconstitution store at +4°C. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use. Guarantee 12 months from date of reconstitution. **Health And Safety** Material Safety Datasheet documentation #10075 available at: Information 10075: https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf Regulatory For research purposes only

# **Related Products**

## **Recommended Negative Controls**

MOUSE IgG2a NEGATIVE CONTROL:RPE (MCA929PE)

## **Recommended Useful Reagents**

**HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)** 

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