

Monoclonal Antibody to CD120a / TNFR1 - PE

Alternate names:	TNF-R1, TNF-RI, TNFR-I, Tnfrsf1a, Tumor necrosis factor receptor 1, Tumor necrosis factor receptor superfamily member 1A, Tumor necrosis factor receptor type I, p55, p60
Catalog No.:	CL044R
Quantity:	50 Tests
Concentration:	0.1 mg/ml
Background:	<p>Tumor Necrosis Factor (TNF) is a cytokine whose function is mediated through two distinct cell surface receptors (TNF Receptor I and TNF Receptor II) that are included in the TNF Receptor superfamily along with FAS antigen and CD40. TNF Receptors I and II are 55 and 75 kDa members, respectively, of a family of cell surface molecules including nerve growth factor receptor, Fas/Apo1, CD30, OX40, and 41BB, which are characterized by cysteine rich motifs in the extracellular domain. While TNF Receptor I and TNF Receptor II share 28% sequence homology in the extracellular domains, their intracellular domains lack sequence homology, suggesting that they differ in their internal signal transduction pathways. TNF Receptor I contains an approximately 80 amino acid death domain near its carboxy terminus capable of transmitting an apoptotic signal through its interaction with TRADD (TNF Receptor I associated death domain protein), and subsequent interactions with FADD. TNF Receptor I can also activate the transcription factor NFkB via TRAF2 (TNF Receptor associated factor 2). The cytoplasmic domain of TNF Receptor I can directly interact with Jak kinase, thereby activating the JAK/STAT signal transduction cascade.</p> <p>TNF Receptor I is expressed by virtually all nucleated mammalian cells, including hepatocytes, monocytes and neutrophils, cardiac muscle cells, endothelial cells, and CD34 + hematopoietic progenitors. Both TNF alpha and TNF beta bind to TNF Receptor I.</p>
Uniprot ID:	P25118
NCBI:	10090
Host / Isotype:	Rat / IgG2a
Clone:	HM104
Format:	State: Liquid purified IgG fraction Buffer System: PBS containing 0.09% Sodium Azide as preservative and EIA grade BSA as a stabilizing protein to bring total protein concentration to 4-5 mg/ml. Label: PE – R-Phycoerythrin
Applications:	Flow Cytometry. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

For research and in vitro use only. Not for diagnostic or therapeutic work.

Material Safety Datasheets are available at www.acris-antibodies.com or on request.

Antibody Hotline - Technical Questions - Antibody Location Service
Free Call: 0800-2274746 (Germany only) - www.acris-antibodies.com

Specificity: This Antibody reacts with the extracellular part of the Mouse TNF-Receptor (p55) and with the soluble receptor.

Species: Mouse.
Other species not tested.

Storage: Store the antibody undiluted at 2-8°C.
DO NOT FREEZE!
This antibody is photosensitive and should be protected from light.
Shelf life: one year from despatch.

Protocols: **FLOW CYTOMETRY ANALYSIS:**

Method:

1. Prepare a cell suspension in media A. For cell preparations, deplete the red blood cell population with Lympholyte®-M cell separation medium.
2. Wash 2 times.
3. Resuspend the cells to a concentration of 2×10^7 cells/ml in media A. Add 50 µl of this suspension to each tube (each tube will then contain 1×10^6 cells, representing 1 test).
4. To each tube, add ~1.0 µg* of this Ab per 10^6 cells.
5. Vortex the tubes to ensure thorough mixing of antibody and cells.
6. Incubate the tubes for 30 minutes at 4°C. (It is recommended that the tubes are protected from light, since most fluorochromes are light sensitive.)
7. Wash 2 times at 4°C.
8. Resuspend the cell pellet in 50 µl ice cold media B.
9. Transfer to suitable tubes for flow cytometric analysis containing 15 µl of propidium iodide at 0.5 mg/ml in PBS. This stains dead cells by intercalating in DNA.

Media:

- A. Phosphate buffered saline (pH 7.2) + 5% normal serum of host species + Sodium Azide (100 µl of 2M Sodium Azide in 100 ml).
- B. Phosphate buffered saline (pH 7.2) + 0.5% Bovine Serum Albumin + Sodium Azide (100 µl of 2M Sodium Azide in 100 ml).

Tissue Distribution by Flow Cytometry Analysis:

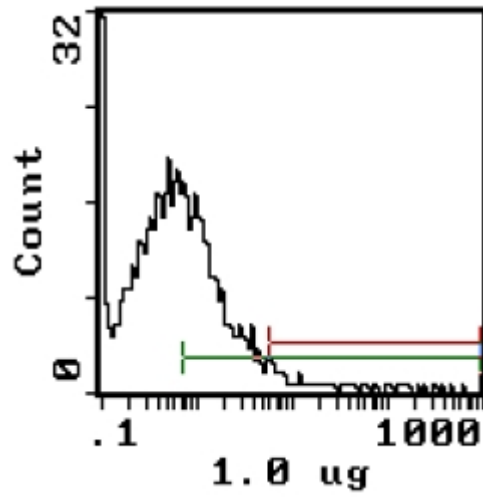
Mouse Strain: CBA
Cell Concentration: 1×10^6 cells per test
Antibody Concentration Used: 1.0 µg/ 10^6 cells
Isotypic Control: PE Rat IgG2a
Cell Source: Spleen
Percentage of Cells Stained Above Control: 7.10%

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Pictures:



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