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Biotinylated Monoclonal Antibody To Human CD120a **Anti human Tumor Necrosis Factor (TNF) - Receptor p55**

Monoclonal antibody htr 9 is useful for studying biological effects of TNF-receptor p55 *in vitro*. The antibody inhibits binding of radiolabeled TNF to human cells expressing the p55 TNF receptor. In order to obtain complete inhibition of TNF binding to the cell surface, 10µg/ml of htr-9 are required. htr 9 itself may have an agonistic effect in assays measuring cytotoxicity, fibroblast growth or IL-6 secretion. See also Product T-1412, anti human CD120b (TNF-receptor p75), clone utr 1.

Product Number:	T-1410 (Lot 01PB9706)
Clone:	htr 9
Host species, isotype:	Mouse IgG1
Quantity:	200µg
Format:	Affinity purified, biotinylated, lyophilized Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.4mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 10mg/ml bovine serum albumin (BSA) as a stabilizer and 0.01% Thimerosal as a preservative.
Stability:	Original vial: 1 year at 4° - 8°C Stock solution or aliquots thereof: 1 year at -20°C. Avoid repeated thawing and freezing.
Applications:	Tested for immunohistochemistry (IHC); has been described to work in FACS and Western Blots. Approximate working dilution for IHC: Frozen sections: 4-8µg/ml (1:50 - 1:100) Paraffin sections: 20µg/ml (1:20); pretreatment not necessary. Optimal dilutions should be determined by the end user. Suggested positive control: Human tonsil. Please see www.bma.ch for protocols and general information.
Immunogen:	Partially purified TNF binding proteins.

Antigen distribution:

Tissue sections: Immunohistochemical staining in normal tissue is confined to the lymphohistiocytic tissue, which includes the thymus and lymphoid organs such as spleen, tonsils, lymph nodes, mucosa, and associated lymphoid tissue (7). Expression of CD120a (and CD120b) can be detected in different areas where an overlapping is found between CD120b and IL-2 receptor expression. CD120b expression can be detected mainly in the T-cell area whereas CD120a expression is restricted to dendritic reticulum cells in the germinal centres.

Cells which are known to respond to TNF namely endothelial cells, smooth muscle cells and fibroblasts did not show expression of CD120a or CD120b. Investigations on pathological tissues show a CD120b expression on epitheloid cell granuloma and giant cells in sarcoidosis.

Specificity:

Human: CD120a.

Other species: not tested.

Selected references

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- Hohmann, H., et al.: Expression of the type A and B Tumor Necrosis Factor (TNF) receptors is independently regulated and both receptors mediate activation of the transcription factor NF- κ B. J Biol Chem (1990) **265**: 22409-22417
- Shalaby, M.R., et al.: Binding and regulation of cellular functions by monoclonal antibodies against human tumor necrosis factor receptors. J Exp Med (1990) **172**: 1517-1520
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- Ryffel B., et al.: Tumor necrosis factor receptors in lymphoid tissues and lymphomas: Source and site of action of tumor necrosis factor alpha. Am J Pathol (1991) **139**: 7-15

For *in vitro* research only. Caution: this product contains thimerosal, a poisonous and hazardous substance.