BMA BIOMEDICALS
Rheinstrasse 28-32
CH-4302 Augst (Switzerland)
Phone:++41 61 811 6222
Fax: ++41 61 811 6006
info@bma.ch
www.bma.ch

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-1409 (Lot 03PO0312)
Clone:	htr 9
Host species, isotype:	Mouse IgG1
Quantity:	200μg
Format:	Affinity purified, lyophilized
	Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.4mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 5mg/ml bovine serum albumin (BSA) as a stabilizer and 0.1% Kathon 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: 2-5μg/ml (1:80 - 1:200) 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

Brockhaus, M et al.: Identification of two types of necrosis factor receptors on human cell lines by monoclonal antibodies. Proc. Natl. Acad Sci USA (1990) **87**: 3127-3131

Espevik,T., et al.: Characterization of binding and biological effects of monoclonal antibodies against a human tumor necrosis factor receptor. J Exp Med (1990) **171**:415-426

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-kB. 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

Gehr, G., et al.: Both tumor necrosis factor receptor types mediate proliferative signals in human mononuclear cell activation. J Immunol (1992) **149**: 911-917

Vandenabeele, P., et al.: Functional characterization of the human tumor necrosis factor receptor p75 in a transfected rat/mouse T cell hybridoma. J Exp Med (1992) **176**: 1015-1024

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. This product contains Kathon as a preservative.