

Mouse Anti-Tumor necrosis factor/TNF alpha [4C6-H8]: MC0954, MC0954RTU7

Intended Use: For Research Use Only

Description: Tumor necrosis factor alpha (TNF-alpha) is a protein secreted by lipopolysaccharide-stimulated macrophages, and causes tumor necrosis when injected into tumor bearing mice. TNF-alpha is believed to mediate pathogenic shock and tissue injury associated with endotoxemia. TNF-alpha exists as a multimer of two, three, or five non-covalently linked units, but shows a single 17kDa band following SDS-PAGE under non-reducing conditions. TNF-alpha is closely related to the 25kDa protein tumor necrosis factor beta (lymphotoxin), sharing the same receptors and cellular actions. TNF-alpha causes cytolysis of certain transformed cells, being synergistic with interferon gamma in its cytotoxicity. Although it has little effect on many cultured normal human cells, TNF-alpha appears to be directly toxic to vascular endothelial cells. Other actions of TNF-alpha include stimulating growth of human fibroblasts and other cell lines, activating polymorphonuclear neutrophils and osteoclasts, and induction of interleukin 1, prostaglandin E2, and collagenase production. TNF-alpha is currently being evaluated in the treatment of certain cancers and AIDS related complex.

Specifications

Clone:	4C6-H8
Source:	Mouse
Isotype:	IgM/k
Reactivity:	Human, mouse, rat, rabbit, cat, dog
Localization:	Cytoplasm, secreted
Formulation:	Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN ₃)
Storage:	Store at 2°- 8°C
Applications:	IHC, Flow Cyt., IF
Package:	

Description	Catalog No.	Size
Tumor necrosis factor/TNF alpha Concentrated	MC0954	1 ml
Tumor necrosis factor/TNF alpha Prediluted	MC0954RTU7	7 ml

IHC Procedure

Positive Control Tissue:	Macrophages in lymph node or tonsil
Concentrated Dilution:	25-100
Pretreatment:	Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes @ RT
Detection:	Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.

References:

1. VEGF-A/VEGFR-2 and FGF-2/FGFR-1 but not PDGF-BB/PDGFR-β play important roles in promoting immature and inflammatory intraplaque angiogenesis. Mao Y, et al. PLoS One 13:e0201395, 2018.
2. Construction of a lentiviral vector containing shRNA targeting ADAM17 and its role in attenuating endotoxemia in mice. He B, et al. Mol Med Rep 16:6013-6019, 2017.
3. Effect of captopril on radiation-induced TGF-β1 secretion in EA.Hy926 human umbilical vein endothelial cells. Wei J, et al. Oncotarget 8:20842-20850, 2017.
4. Neutrophils Increase Oral Squamous Cell Carcinoma Invasion through an Invadopodia-Dependent Pathway. Glogauer JE, et al. Cancer Immunol Res 3:1218-26, 2015.
5. Intraarticular glucocorticoid treatment reduces inflammation in synovial cell infiltrations more efficiently than in synovial blood vessels. af Klint E, et al. Arthritis Rheum 52:3880-9, 2005.

Doc. 100-MC0954
Rev. A