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DATA SHEET

# Mouse Anti-Tumor necrosis factor/TNF alpha [TNFA/1172]: 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: | TNFA/1172 |
| Source: | Mouse |
| Isotype: | IgM/k |
| Reactivity: | Human, rat |
| Immunogen: | Recombinant full-length human TNF-alpha protein |
| Localization: | Cytoplasm, secreted |
| Formulation: | Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3) |
| Storage: | Store at 2°- 8°C |
| Applications: | IHC, Flow Cyt., IF |

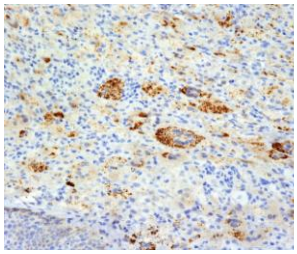
Package:

| 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: | Pancreas or Histiocytoma, HeLa, HepG2, HL-60 or A431 cells |
| 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.



FFPE human Chester disease (polyostotic sclerosing histiocytosis) stained with anti-TNF alpha using DAB

**References:**


1. VEGF-A/VEGFR-2 and FGF-2/FGFR-1 but not PDGF-BB/PDGFR-ß 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-ß1 secretion in EA.Hy926 human umbilical vein endothelial cells. Wei J, et al. Oncotarget 8:20842-20850, 2017.



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Rev. B



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