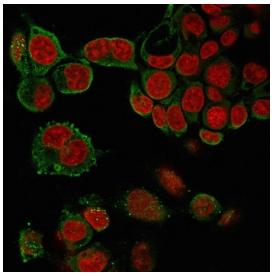
TNF alpha Antibody [clone 4C6-H8] (V2275)

Catalog No.	Formulation	Size
V2275-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2275-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2275SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

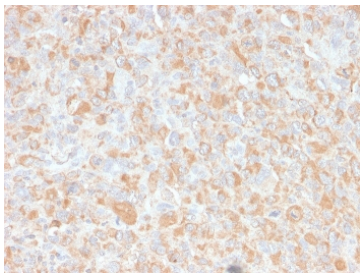
Citations (2)

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgM, kappa
Clone Name	4C6-H8
Purity	PEG precipitation
Buffer	1X PBS, pH 7.4
Gene ID	7124
Localization	Cytoplasmic and extracellular (secreted)
Applications	Flow Cytometry : 0.5-1ug/10^6 cells Immunofluorescence : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-4ug/ml for 30 min at RT
Limitations	This TNF alpha antibody is available for research use only.



Immunofluorescent staining of PFA-treated human HepG2 cells with TNF alpha antibody (clone 4C6-H8, green) and Reddot nuclear stain (red).



IHC staining of FFPE human histiocytoma with TNF alpha antibody. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA, for 10-20 min and allow to cool before testing.

Description

This antibody is specific for a 17-26kDa protein, which is identified as the cytokine TNF alpha (Tumor Necrosis Factor alpha). It can be expressed as a 17kDa free molecule, or as a 26kDa membrane protein. It 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. It exists as a multimer of two, three, or five non-covalently linked units, but shows a single 17kDa band following SDS PAGE under 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 treatment of certain cancers and AIDS Related Complex.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the antibody to be titered up or down for optimal performance.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate Buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes.

Immunogen

A hexadecapeptide corresponding to aa 115-130 of human TNF alpha, conjugated to thyroglobulin, was used as the immunogen for this TNF alpha antibody.

Storage

Store the TNF alpha antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

References (2)