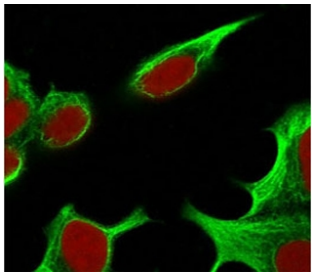
# TNF alpha Antibody [clone TMDa1-1] (V7163)

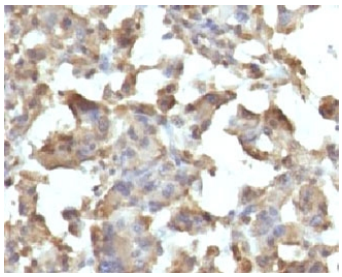
| Catalog No. | Formulation | Size |
|---|---|---|
| V7163-100UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide | 100 ug |
| V7163-20UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide | 20 ug |
| V7163SAF-100UG | 1 mg/ml in 1X PBS; BSA free, sodium azide free | 100 ug |

**Bulk quote request**

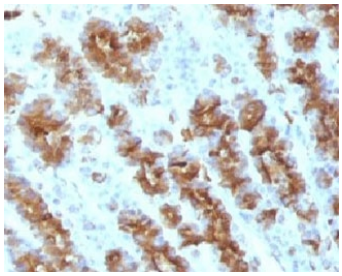
| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human, Rat |
| **Format** | Purified |
| **Host** | Mouse |
| **Clonality** | Monoclonal (mouse origin) |
| **Isotype** | Mouse IgM, kappa |
| **Clone Name** | TMDa1-1 |
| **Purity** | PEG precipitation |
| **UniProt** | P01375 |
| **Localization** | Cytoplasmic and extracellular (secreted) |
| **Applications** | Immunofluorescence: 1-2ug/ml<br>Flow cytometry: 1-2ug/10^6 cells<br>Immunohistochemistry (FFPE): 2-4ug/ml for 30 min at RT |
| **Limitations** | This TNF alpha antibody is available for research use only. |



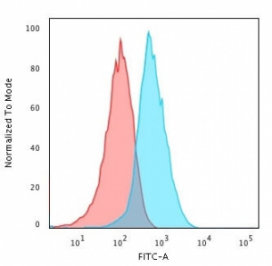
Immunofluorescent staining of PFA-fixed human HepG2 cells with TNF-alpha antibody (green, clone TMDa1-1) and Reddot nuclear stain (red).



IHC testing of FFPE human histiocytoma and TNF alpha antibody (clone TMDa1-1). Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Tris buffer with 1mM EDTA, pH 9, for 10-20 min followed by cooling at RT for 20 min.



IHC testing of FFPE rat stomach and TNF alpha antibody (clone TMDa1-1). Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Tris buffer with 1mM EDTA, pH 9, for 10-20 min followed by cooling at RT for 20 min.




Flow cytometry testing of PFA-fixed human HepG2 cells with TNF-alpha antibody (clone TMDa1-1); Red=isotype control, Blue= TNF-alpha antibody.

## Description

Tumor Necrosis Factor Alpha (TNF alpha) is a cytokine that binds to TNFRSF1A/TNFR1 and TNFRSF1B/TNFBR. It is mainly secreted by macrophages and can induce cell death of certain tumor cell lines. It is potent pyrogen causing fever by direct action or by stimulation of interleukin-1 secretion and is implicated in the induction of cachexia, Under certain conditions it can stimulate cell proliferation and induce cell differentiation. Impairs regulatory T-cells (Treg) function in individuals with rheumatoid arthritis via FOXP3 dephosphorylation. Upregulates the expression of protein phosphatase 1 (PP1), which dephosphorylates the key 'Ser-418' residue of FOXP3, thereby inactivating FOXP3 and rendering Treg cells functionally defective. Key mediator of cell death in the anticancer action of BCG-stimulated neutrophils in combination with DIABLO/SMAC mimetic in the RT4v6 bladder cancer cell line. [UniProt]

## Application Notes

Titering of the TNF alpha antibody may be required for optimal performance.

## Immunogen

Full length human recombinant protein was used as the immunogen for the TNF alpha antibody.

## Storage

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

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