

# Anti-Human TNF-alpha Antibody, Clone MT15B15, PF647P

Mouse monoclonal antibody against human TNF-alpha, PF647P-conjugated

Catalog #100-1461

100 Tests

5 µL/test

## Product Description

This mouse monoclonal antibody (clone MT15B15) reacts with human tumor necrosis factor alpha (TNF- $\alpha$ ). TNF- $\alpha$  is a pro-inflammatory cytokine primarily produced by macrophages and T cells in response to infection and inflammation. Initially generated as a ~26 kDa transmembrane precursor, TNF- $\alpha$  is then processed by metalloproteinases into a ~17 kDa soluble product. Both forms of TNF- $\alpha$  are active in trimeric form and exert their effects via binding to either TNFR1, present on the surface of nearly all human cell types, or TNFR2, which is localized to immune and endothelial cells. First described as having tumor-necrotic action, TNF- $\alpha$  signaling results in an inflammatory response that includes vasodilation and edema formation, adhesion of leukocytes to the epithelium, and blood coagulation. TNF- $\alpha$  also plays a key role in defense against bacterial, viral, and parasitic infections. The MT15B15 antibody is suitable for the detection of intracellular TNF- $\alpha$  by flow cytometry.

<b>Target Antigen:</b>	TNF-alpha
<b>Alternative Names:</b>	Cachectin, DIF, DIF-alpha, differentiation inducing factor, TNF, TNF- $\alpha$ , TNF-a, TNFa, TNFA, TNFSF2, TNLG1F, tumor necrosis factor, tumor necrosis factor- $\alpha$
<b>Gene ID:</b>	7124
<b>Species Reactivity:</b>	Human
<b>Host Species:</b>	Mouse
<b>Clonality:</b>	Monoclonal
<b>Clone:</b>	MT15B15
<b>Isotype:</b>	IgG1
<b>Immunogen:</b>	Recombinant human TNF- $\alpha$
<b>Conjugate:</b>	PF647P

## Applications

Verified Applications: FC

Abbreviations: CellSep: Cell separation; CHIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IHC-P: Immunohistochemistry (paraffin-embedded); IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

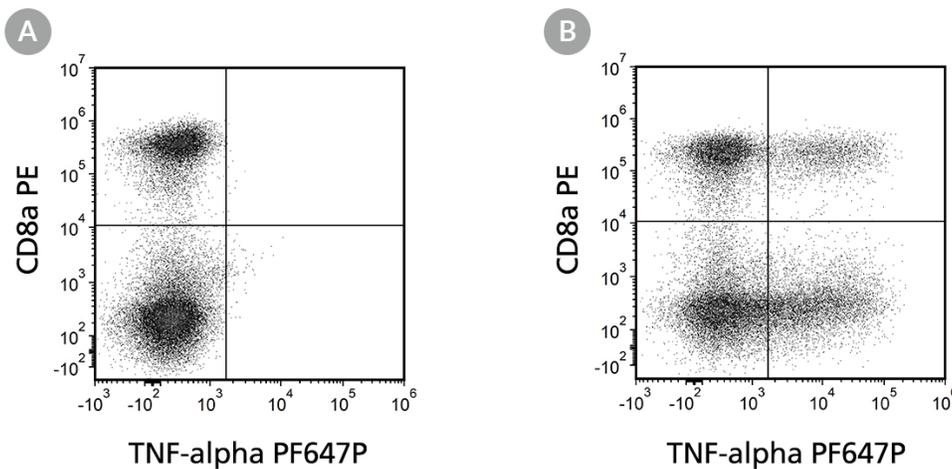
## Properties

**Purification:** The antibody was purified by affinity chromatography and conjugated with PF647P.

**Stability and Storage:** Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. Stable until expiry date (EXP) on label.

**Directions for Use:** For flow cytometry, the suggested use of this antibody is 5 µL per 1 x 10<sup>6</sup> cells in 50 µL. It is recommended that the antibody be titrated for optimal performance for each application.

## Data



**Figure 1. Flow Cytometry Analysis of Unstimulated and Stimulated Human T Cells Labeled With Anti-Human TNF-alpha Antibody, Clone MT15B15, PF647P**

(A) Flow cytometry analysis of unstimulated human T cells labeled with anti-human TNF-alpha Antibody, Clone MT15B15, PF647P and anti-human CD8a antibody, clone RPA-T8, PE (Catalog #60022PE). (B) Flow cytometry analysis of PMA/ionomycin-stimulated human T cells labeled with anti-human TNF-alpha Antibody, Clone MT15B15, PF647P and anti-human CD8a antibody, clone RPA-T8, PE (Catalog #60022PE).

## Related Products

For a complete list of antibodies, including other conjugates, sizes, and clones, as well as related products available from STEMCELL Technologies, visit [www.stemcell.com/antibodies](http://www.stemcell.com/antibodies), or contact us at [techsupport@stemcell.com](mailto:techsupport@stemcell.com).

## References

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