

# Product Data Sheet

## PE anti-mouse / rat TNF- $\alpha$

**Catalog # / Size:** 506104 / 100  $\mu$ g

**Clone:** TN3-19.12

**Isotype:** Armenian Hamster IgG

**Immunogen:** *E. coli*-expressed, recombinant mouse TNF- $\alpha$

**Reactivity:** Mouse, Rat, **Cross-Reactivity\*:** Rabbit (Lapine)

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.2 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**

## Applications:

**Applications:** ICFC - *Quality tested*

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is  $\leq 0.25$   $\mu$ g per million cells in 100  $\mu$ l volume or 100  $\mu$ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** **ELISA or ELISPOT Capture<sup>1</sup>:** The purified TN3-19.12 antibody is useful as the capture antibody in a sandwich ELISA or ELISPOT assay, when used in conjunction with the biotinylated Poly5062 antibody (Cat. No. 506201) as the detecting antibody for detecting mouse/rat TNF- $\alpha$ . The LEAF™ purified antibody is suggested for ELISPOT capture.

**Application References:**

1. Sheehan, K., *et al.* 1989. *J. Immunol.* 142:3884.
2. Merrick, B.A., *et al.* 1992. *Appl. Theor. Electrophor* 2:177.
3. Takahashi, S., *et al.* 1995. *Brain Res* 690:241.
4. Rabinovich, R., *et al.* 1993. *J. Pharmacol. Exp. Ther.* 267:1550.
5. Molloy, R., *et al.* 1993. *J. Immunol.* 151:2142.
6. Finkelman, F., *et al.* 2003. *Curr. Prot. Immunol.* John Wiley & Sons, New York. Unit 6.28.

**Description:** TNF- $\alpha$  is secreted by macrophages, monocytes, neutrophils, T-cells (principally CD4<sup>+</sup>), and NK-cells. Many transformed cell lines also secrete TNF- $\alpha$ . Monomeric mouse TNF- $\alpha$  is 156 amino acid protein (N-glycosylated) with a reported molecular weight of 17.5 kD protein. TNF- $\alpha$  forms multimeric complexes; stable trimers are most common in solution. A 26 kD membrane form of TNF- $\alpha$  has also been described. TNF- $\alpha$  binding to surface receptors elicits a wide array of biologic activities including: cytolysis and cytostasis of many tumor cell lines *in vitro*, hemorrhagic necrosis of tumors *in vivo*, increased fibroblast proliferation, and enhanced chemotaxis and phagocytosis in neutrophils. The TN3-19.12 antibody reacts with mouse, rat, and rabbit tumor-necrosis factor- $\alpha$  (TNF- $\alpha$ ) proteins. The TN3-19.12 antibody can neutralize the bioactivity of natural or recombinant TNF- $\alpha$ .

**Antigen References:**

1. Fitzgerald, K., *et al.* Eds. 2001. *The Cytokine FactsBook*. Academic Press, San Diego.
2. Beutler, B., *et al.* 1988. *Annu. Rev. Biochem.* 57:505.
3. Beutler, B., *et al.* 1989. *Annu. Rev. Immunol.* 7:625.
4. Tracey, K., *et al.* 1993. *Crit. Care Med.* 21:S415.

Related Products:	Product	Clone	Application
	Cell Staining Buffer		FC, ICC, ICFC
	Fixation Buffer		ICC, ICFC
	Permeabilization Wash Buffer (10X)		ICC, ICFC, IHC
	Brefeldin A Solution (1,000X)		ICFC
	Monensin Solution (1,000X)		ICFC
	RBC Lysis Buffer (10X)		FC, ICFC
	PE Armenian Hamster IgG Isotype Ctrl	HTK888	FC, ICFC



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