

#3707 Store at -20C

TNF- α Antibody



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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB, IP	H M	Endogenous	17 mature. 25 precursor.	Rabbit	#P01375	7124

Product Usage Information	Application Western Blotting Immunoprecipitation	Dilution 1:1000 1:25
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.	
Specificity / Sensitivity	TNF- α Antibody detects endogenous levels of mature TNF- α as well TNF- α precursor protein.	
Species predicted to react based on 100% sequence homology:	Monkey, Pig	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly198 of human TNF- α protein. Antibodies are purified by protein A and peptide affinity chromatography.	
Background	TNF- α , the prototypical member of the TNF protein superfamily, is a homotrimeric type-II membrane protein (1,2). Membrane-bound TNF- α is cleaved by the metalloprotease TACE/ADAM17 to generate a soluble homotrimer (2). Both membrane and soluble forms of TNF- α are biologically active. TNF- α is produced by a variety of immune cells including T cells, B cells, NK cells, and macrophages (1). Cellular response to TNF- α is mediated through interaction with receptors TNF-R1 and TNF-R2 and results in activation of pathways that favor both cell survival and apoptosis depending on the cell type and biological context. Activation of kinase pathways (including JNK, Erk1/2, p38 MAPK, and NF- κ B) promotes the survival of cells, while TNF- α -mediated activation of caspase-8 leads to programmed cell death (1,2). TNF- α plays a key regulatory role in inflammation and host defense against bacterial infection, notably <i>Mycobacterium tuberculosis</i> (3).	
Background References	1. Aggarwal, B.B. (2003) <i>Nat Rev Immunol</i> 3, 745-56. 2. Hehlhans, T. and Pfeffer, K. (2005) <i>Immunology</i> 115, 1-20. 3. Lin, P.L. et al. (2007) <i>J Invest Dermatol Symp Proc</i> 12, 22-5.	

Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
Western Blot Buffer	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
Applications Key	WB: Western Blotting IP: Immunoprecipitation
Cross-Reactivity Key	H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse GP: Guinea Pig Rab: rabbit All: all species expected
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