## TNF-Alpha Monoclonal Mouse Antibody (TNF656)



## **Product Description**

This MAb recognizes human 17-26 kDa protein, which is identified as cytokine TNF-alpha (Tumor Necrosis Factor-alpha). TNF-alpha can be expressed as a 17 kDa free molecule, or as a 26 kDa membrane protein. TNF-alpha 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. TNF alpha exists as a multimer of two, three, or five non-covalently linked units, but shows a single 17 kDa band following SDS PAGE under non-reducing conditions. TNF alpha is closely related to the 25 kDa 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.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email <a href="mailto:order@biotium.com">order@biotium.com</a> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0656, Anti-TNF-Alpha (TNF656)

## Product attributes

Product attributes				
Antibody number	90656			
Antibody reactivity (target)	TNF-Alpha			
Antibody type	Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	TNF656			
Isotype	lgG1, kappa			
Molecular weight	17 kDa			
Synonyms	APC1; Cachectin; Differentiation inducing factor (DIF); Macrophage optioxic factor (MCF); Necrosin; TNF alpha; TNF Macrophage Derived; TNF Monocyte Derived; TNF Superfamily Member 2; TNFA; TNFSF2; Tumor necrosis factor ligand superfamily member 2; Tumor Necrosis Factor Precursor			
Human gene symbol	TNF			
Entrez gene ID	7124			
SwissProt	P01375			
Unigene	241570			
Immunogen	Recombinant human TNF-alpha			
Antibody target cellular localization	Secreted (extracellular)			
Species reactivity	Human			
Antibody application notes	For coating for ELISA, order Ab without BSA, Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Optimal dilution and staining procedure for a specific application should be determined by user, Recommended starting concentrations for titration are 1-2 ug/mL for most applications, or 1 ug/million cells/100 uL for flow cytometry			
Positive control	HeLa, HL-60, or A431 cells. Macrophages in lymph node or Tonsil			
Shipping condition	Room temperature			
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C			
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended			
Regulatory status	For research use only (RUO)			
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide			
Antibody research areas	Cytokines, Immunology			
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.			

Call us: 800-304-5357 Email: techsupport@biotium.com

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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This datasheet was generated on October 28, 2025 at 11:13:16 AM. Visit product page to check for updated information before use. Product link: <a href="https://biotium.com/product/monoclonal-anti-tnf-alpha-tnf656/">https://biotium.com/product/monoclonal-anti-tnf-alpha-tnf656/</a>