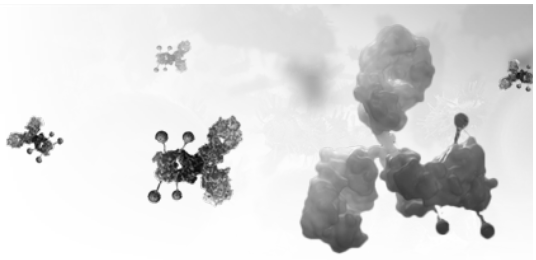

Rat Anti-Mouse TNFα Monoclonal antibody, clone XT3.11 (CABT-L4380)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	The XT3.11 monoclonal antibody reacts with mouse TNFα (tumor necrosis factor-alpha) a multifunctional proinflammatory cytokine. TNFα exists as a soluble 17 kDa monomer, which forms homotrimers in circulation or as a 26 kDa membrane-bound form. TNFα belongs to the TNF superfamily of cytokines and signals through its two receptors, TNFR1 and TNFR2 which can be activated by both the soluble trimeric and membrane-bound and forms of TNFα. TNFα is primarily produced by macrophages in response to foreign antigens such as bacteria (lipopolysaccharides), viruses, and parasites as well as mitogens and other cytokines but can also be expressed by monocytes, neutrophils, NK cells, CD4 T cells and some specialized dendritic cells. TNFα is known to play key roles in a wide spectrum of biological processes including immunoregulation, cell proliferation, differentiation, apoptosis, antitumor activity, inflammation, anorexia, cachexia, septic shock, hematopoiesis, and viral replication. TNFα dysregulation has been implicated in a variety of diseases, including autoimmune diseases, insulin resistance, and cancer. Mouse and human TNFα share 79% amino acid sequence identity however, mouse TNFα is glycosylated while human TNFα is not. TNFα knockout animals display defects in response to bacterial infection, characterized by defects in forming organized follicular dendritic cell networks and germinal centers with a lack of primary B cell follicles.
Target	Mouse TNFα
Immunogen	Recombinant mouse TNFα
Isotype	IgG1
Source/Host	Rat
Species Reactivity	Mouse
Clone	XT3.11

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Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	in vivo TNFα neutralization, in vitro TNFα neutralization, WB
Molecular Weight	150 kDa
Format	0.2 μM filtered liquid. Purified from tissue culture supernatant in an animal free facility
Concentration	Lot specific
Size	5 mg
Buffer	PBS, pH 8.0. Contains no stabilizers or preservatives. [low endotoxin azide-free] Endotoxin level: <2EU/mg (<0.002EU/μg). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB01
Preservative	None
Storage	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	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.
Keywords	APC1;APC1 protein;Cachectin;DIF;Differentiation inducing factor;Macrophage cytotoxic factor;MCF;Necrosin;TNF a;TNF alpha

GENE INFORMATION

Official Symbol	Tumor necrosis factor alpha
Synonyms	APC1; APC1 protein; Cachectin; DIF; Differentiation inducing factor; Macrophage cytotoxic factor; MCF; Necrosin; TNF a; TNF alpha

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