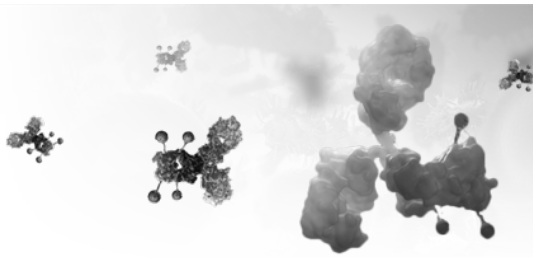

Mouse anti Guinea Pig TNF monoclonal antibody, clone 670917 [Biotin] (CABT-L156)

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

PRODUCT INFORMATION

Specificity	Detects recombinant guinea pig TNF-alpha in ELISAs. In sandwich immunoassays, no cross-reactivity with human, mouse, rat, porcine, canine, feline, equine, bovine, or cotton rat TNF-alpha is observed.
Target	TNF-alpha
Immunogen	E. coli-derived recombinant guinea pig TNF-alpha Leu79-Leu234, Accession #P51435
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Guinea Pig
Clone	670917
Purification	Protein A or G purified from hybridoma culture supernatant
Conjugate	Biotin
Applications	ELISA(Det)
Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Format	Lyophilized
Size	250 µg
Buffer	PBS with BSA
Preservative	None

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Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.
Ship	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

BACKGROUND

Introduction	Tumornecrosis factor alpha (TNF-alpha), also known as cachectin and TNFSF2, isthe prototypic ligand of the TNF superfamily. It is a pleiotropicmolecule that plays a central role in inflammation, apoptosis, andimmune system development. TNF-alpha is produced by a wide variety of immuneand epithelial cell types. Guinea pig TNF-alpha consists of a 35amino acid (aa) cytoplasmic domain, a 21 aa transmembrane segment, and a155 aa extracellular domain (ECD). Within the ECD, guinea pig TNF-alpha shares 80%-83% aa sequence identity with human, mouse, and rat TNF-alpha. The 26 kDa type 2 transmembrane protein is assembledintracellularly to form a noncovalently linked homotrimer. Ligation of this complex induces reverse signaling that promotes lymphocyteco-stimulation but diminishes monocyte responsiveness. Cleavage of membrane bound TNF-alpha by TACE/ADAM17 releases a 55 kDa soluble trimericform of TNF-alpha. TNF-alpha trimers bind the ubiquitous TNF RI and the hematopoietic cell-restricted TNF RII, both of which are also expressedas homotrimers. TNF-alpha regulates lymphoid tissue development through control of apoptosis. It also promotes inflammatoryresponses by inducing the activation of vascular endothelial cells and macrophages. TNF-alpha is a key cytokine in the development of several inflammatory disorders. It contributes to the development of type 2 diabetes through its effects on insulin resistance and fatty acid metabolism.
Keywords	APC1 protein;Cachectin;Cachetin;DIF;TNF;TNF; monocyte-derived;tnfa;tnf-a;TNFalpha;TNF-alpha;TNF-alphacachectin;TNFATNF; macrophage-derived;TNFSF1A;TNFSF2;TNFSF2TNF superfamily; member 2;tumor necrosis factor (TNF superfamily; member 2);tumor necrosis factor alpha;Tumor necrosis factor ligand superfamily member 2;tumor necrosis factor;tumor necrosis factor-alpha

GENE INFORMATION

UniProt ID	P51435

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