



Mouse anti Human LTA monoclonal antibody, clone 6918 (CABT-L221)

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

PRODUCT INFORMATION

Specificity Detects human Lymphotoxin-alpha /TNF-beta in ELISAs. In sandwich immunoassays, approximately 10% cross-reactivity with recombinant mouse TNF-beta is observed and no cross-reactivity with bovine FGF acidic, recombinant human (rh) GM-CSF, rhIL-1 alpha, rhIL-1 beta, rhIL-2, rhIL-3, rhIL-4, rhIL-6, rhIL-8, rhTNF-alpha, rhPDGF, rpPDGF, rhTGF-beta 1, recombinant porcine (rp) TGF-beta 1, rpTGF-beta 1.2, or rpTGF-beta 2 is observed.

Target Lymphotoxin-alpha/TNF-beta

Immunogen E. coli-derived recombinant human Lymphotoxin-alpha /TNF-beta

Isotype IgG2A

Source/Host Mouse

Species Reactivity Human

Clone 6918

Purification Protein A or G purified from ascites

Conjugate Unconjugated

Applications ELISA(Cap)

Reconstitution Reconstitute at 0.5 mg/mL in sterile PBS.

Format Lyophilized; Small package size(SP): Liquid

Size 25 µg, 1 mg

Buffer PBS with Trehalose

Preservative	None
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. *Small pack size (SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C.

BACKGROUND

Introduction Tumor necrosis factor beta (TNF-beta), also known as lymphotoxin-alpha (LT-alpha), and TNF-alpha, are two structurally and functionally related proteins that bind to the same cell surface receptors (TNF RI and TNF RII) and produce a vast range of similar, but not identical, effects. Among these effects is the ability to kill certain tumor cells directly, from which the names tumor necrosis factor and lymphotoxin both derive. Mature TNF-beta/ LT-alpha and TNF-alpha share approximately 35% protein sequence homology and the biologically active secreted forms of both proteins are homotrimers. Whereas TNF-alpha can exist as a type II membrane protein, TNF-beta/ LT-alpha possesses a typical signal peptide sequence and is a secreted protein. It has been shown that TNF-beta/ LT-alpha is also present on the cell surface of activated T, B and LAK cells as a heteromeric complex with LT-beta, a type II membrane protein that is another member of the TNF ligand family. The genes for TNF-alpha, TNF-beta/ LT-alpha, and LT-beta are closely linked within the major histocompatibility complex. TNF-beta/ LT-alpha is expressed in activated T- and B-lymphocytes. In addition to its cytotoxic action on tumor cells, TNF-beta/ LT-alpha has been shown to be a mediator of inflammation and immune function. Evidence is also accumulating that TNF-beta/ LT-alpha and TNF-alpha are mediators in the pathogenesis of certain autoimmune diseases. TNF-beta/ LT-alpha has also been shown to have a role in lymphoid organ development. Human and mouse TNF-beta/ LT-alpha share approximately 74% homology in their amino acid sequence and exhibit cross-species activity.

Keywords LT;LTA;LT-alpha;lymphotoxin alpha (TNF superfamily; member 1);Lymphotoxin alpha;Lymphotoxin alpha;Lymphotoxin-alpha;tnfb;TNF-beta;TNFBlymphotoxin-alpha;TNFSF1;TNFSF1B;TNFSF1TNF-beta;tumor necrosis factor beta;Tumor necrosis factor ligand superfamily member 1

GENE INFORMATION

Entrez Gene ID [4049](#)

UniProt ID [P01374](#)