



Mouse Anti-Human CD40L (CD154) Monoclonal antibody, clone 5C8 (CABT-L4522)

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

PRODUCT INFORMATION

Product Overview

The 5C8 monoclonal antibody reacts with human and cynomolgus monkey CD154 also known as CD40 ligand. CD154 exists as a 39 kDa accessory molecule and belongs to the TNF superfamily of cytokines. CD154 is primarily expressed on the surface of activated CD4+ T lymphocytes but can also be expressed by platelets, mast cells, macrophages, basophils, NK cells, B lymphocytes, CD8+ T lymphocytes as well as non-hematopoietic cells including smooth muscle cells, endothelial cells, and epithelial cells. CD154 signals through CD40 and is thought to play a key role in T and B lymphocyte co-stimulation. The 5C8 monoclonal antibody has been reported to block CD40L-CD40 interactions.

Target	Human/monkey CD40L (CD154)
Immunogen	Human D1.1 T cell line
Isotype	IgG2a
Source/Host	Mouse
Species Reactivity	Human, Monkey
Clone	5C8
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	in vitro blocking of CD40/CD40L signaling, in vivo blocking of CD40/CD40L signaling, IP, FC
Molecular Weight	150 kDa
Format	0.2 µm filtration liquid. Purified from tissue culture supernatant in an animal free facility

Concentration	Lot specific
Size	5 mg
Buffer	PBS, pH 7.0. low endotoxin azide-free
	Endotoxin level: <2EU/mg (<0.002EU/µg). Determined by LAL gel clotting assay
	Related dilution buffer: CABT-LB04
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	The protein encoded by this gene is expressed on the surface of T cells. It regulates B cell function by engaging CD40 on the B cell surface. A defect in this gene results in an inability to undergo immunoglobulin class switch and is associated with hyper-IgM syndrome. [provided by RefSeq, Jul 2008]
Keywords	CD40LG;CD40 ligand;IGM;IMD3;TRAP;gp39;CD154;CD40L;HIGM1;T-BAM;TNFSF5;hCD40L;CD40-L;CD40 antigen ligand;T-cell antigen Gp39;T-B cell-activating molecule;TNF-related activation protein;tumor necrosis factor (ligand) superfamily member 5;

GENE INFORMATION

Official Symbol	CD40 ligand
Synonyms	CD40LG; CD40 ligand; IGM; IMD3; TRAP; gp39; CD154; CD40L; HIGM1; T-BAM; TNFSF5; hCD40L; CD40-L; CD40 antigen ligand; T-cell antigen Gp39; T-B cell-activating molecule; TNF-related activation protein; tumor necrosis factor (ligand) superfamily member 5;
References	Nadazdin, O., et al. (2011). "Contributions of direct and indirect alloresponses to chronic rejection of kidney allografts in nonhuman primates." <i>J Immunol</i> 187(9): 4589-4597. PubMed;