



Anti-CD40LG monoclonal antibody, clone 1H4 (CABT-47137MH)

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

PRODUCT INFORMATION

Product Overview

Mouse anti Human CD154 (Soluble) antibody, clone 1H4 recognizes the soluble form of CD154, otherwise known as CD40 Ligand/TRAP, a 32kD glycoprotein and member of the TNF family, which is specifically expressed on activated, but not resting, CD4+ T cells, dendritic cells (DCs), B cells and macrophages. CD154 binds CD40, and acts as a key co-stimulatory molecule through the activation of antigen-presenting cells, and as a regulator of the generation and functional properties of Th1 helper cells. CD154 exists in both a membrane-bound and soluble form, the latter of which is generated through proteolytic processing by a matrix metalloproteinase (MMP), in activated cells. The binding of CD154 with its receptor CD40 is vital for many biological processes, including Ig class switching, germinal centre formation and the survival of CD40+ B cells, B cell proliferation in the absence of co-stimulus, the production of IgE in the presence of interleukin-4 (IL-4), and also in the production of pro-inflammatory cytokines, MMPs, prostaglandins and adhesion molecule upregulation, in non-immune cells. Mouse anti Human CD154 (Soluble) antibody, clone 1H4 recognizes the soluble form of the protein.

Specificity	CD154
Immunogen	Recombinant human soluble CD154 conjugated to BSA.
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Human
Clone	1H4
Conjugate	Unconjugated
Applications	ELISA; WB

Format	Purified IgG - liquid
Size	200 µg
Preservative	0.09% Sodium Azide
Storage	in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

GENE INFORMATION

Gene Name	CD40LG CD40 ligand [Homo sapiens (human)]
Official Symbol	CD40LG
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; CD
Entrez Gene ID	959
Protein Refseq	NP_000065
UniProt ID	P29965
Chromosome Location	Xq26
Pathway	Adaptive Immune System; Allograft Rejection; Allograft rejection; Asthma; Autoimmune thyroid disease; CD40/CD40L signaling; Calcineurin-regulated NFAT-dependent transcription in lymphocytes; Calcium signaling in the CD4+ TCR pathway;
Function	CD40 receptor binding; cytokine activity; tumor necrosis factor receptor binding;