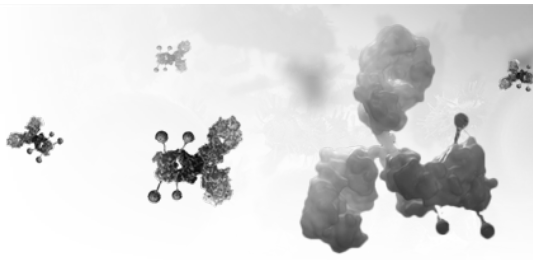

Mouse Anti-Human CD4 Monoclonal antibody, clone RPA-T4 (CABT-L4520)

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

PRODUCT INFORMATION

Product Overview	The RPA-T4 monoclonal antibody reacts with the human CD4. The CD4 antigen is a 55 kDa cell surface type I membrane glycoprotein belonging to the immunoglobulin superfamily.
Target	Human CD4
Immunogen	C57BL/6 mouse T cell lymphoma EL-4 cells
Isotype	IgG1, κ
Source/Host	Mouse
Species Reactivity	Human
Clone	RPA-T4
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	in vitro CD4 blockade, in vitro blocking of CD4+ T cell activation, IF, IHC-F, FC
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 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free]

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	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 RPA-T4 monoclonal antibody reacts with the human CD4. The CD4 antigen is a 55 kDa cell surface type I membrane glycoprotein belonging to the immunoglobulin superfamily. CD4 acts as a co-receptor which in cooperation with the T cell receptor (TCR) interacts with class II MHC molecules displayed by antigen presenting cells (APC). CD4 is expressed by most thymocytes and helper T cells, a subset of NK-T cells and weakly by dendritic cells and macrophages. CD4 plays an important role in the development of T cells and is required for mature T cells to function optimally. The RPA-T4 antibody is reported to bind to the D1 domain of CD4 and does not block the binding of the OKT-4 antibody. Additionally, RPA-T4 has been shown to block the binding of HIV gp120 protein to CD4 and inhibit CD4 T cell activation in vitro.
Keywords	CD4;T-cell surface glycoprotein CD4;cell surface glycoprotein CD4;T-cell surface antigen T4/Leu-3;

GENE INFORMATION

Official Symbol	CD4 molecule
Synonyms	CD4; T-cell surface glycoprotein CD4; cell surface glycoprotein CD4; T-cell surface antigen T4/Leu-3;
References	Moolla, N., et al. (2016). "Thioredoxin (Trx1) regulates CD4 membrane domain localization and is required for efficient CD4-dependent HIV-1 entry." Biochim Biophys Acta 1860(9): 1854-1863. PubMed;

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