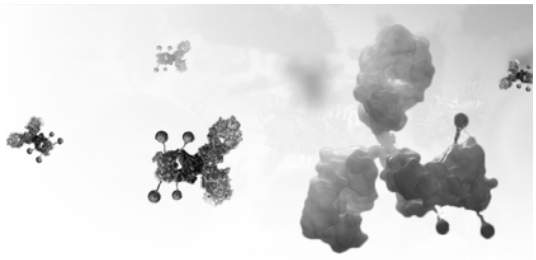

Rat Anti-Mouse CD4 Monoclonal antibody, clone YTS 177 (CABT-L4354)

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

PRODUCT INFORMATION

Product Overview	The YTS 177 monoclonal antibody reacts with the mouse CD4. The CD4 antigen is a 55 kDa cell surface type I membrane glycoprotein belonging to the immunoglobulin superfamily.
Target	Mouse CD4
Immunogen	Mouse Spleen Cells
Isotype	IgG2a
Source/Host	Rat
Species Reactivity	Mouse
Clone	YTS 177
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	in vivo blockade of CD4+ T-cell responses, WB
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 YTS 177 monoclonal antibody reacts with the mouse 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 the majority of thymocytes, most 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 YTS 177 antibody has been shown to compete with clones GK1.5 and YTS 191 for CD4 binding. Additionally, the YTS 177 antibody has been reported to be non-depleting but binding does induce rapid internalization of CD4 on both CD4+ Foxp3- T cells and Foxp3+ regulatory T cells. Further, the YTS 177 clone has been shown to suppress or even prevent allograft rejection, allergic reactions and autoimmune responses.
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	Li, Z., et al. (2015). "Pre-treatment of allogeneic bone marrow recipients with the CXCR4 antagonist AMD3100 transiently enhances hematopoietic chimerism without promoting donor-specific skin allograft tolerance." Transpl Immunol 33(2): 125-129. PubMed;

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