



Rat anti-Mouse CD4 Monoclonal antibody [clone ZUT202.2], Pacific Blue®-Conjugated (CABT-45133RM)

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

PRODUCT INFORMATION

Antigen Description	In molecular biology, CD4 (cluster of differentiation 4) is a glycoprotein found on the surface of immune cells such as T helper cells, monocytes, macrophages, and dendritic cells. It was discovered in the late 1970s and was originally known as leu-3 and T4 (after the OKT4 monoclonal antibody that reacted with it) before being named CD4 in 1984. In humans, the CD4 protein is encoded by the CD4 gene.
Specificity	Rat anti Mouse CD4 antibody, clone ZUT202.2 recognizes the murine CD4 cell surface antigen, expressed by a subset of T lymphocytes. Rat anti Mouse CD4 antibody, clone ZUT202.2 exhibits depleting activity when used in vivo.
Isotype	IgG2b
Source/Host	Rat
Species Reactivity	Mouse
Clone	ZUT202.2
Conjugate	Pacific Blue®
Applications	Flow Cytometry
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant.
Format	Purified IgG conjugated to Pacific Blue® - liquid.
Concentration	IgG concentration 0.05 mg/ml.
Size	25 Tests/0.25ml
Buffer	Phosphate buffered saline.
Preservative	0.09% Sodium Azide, 1% Bovine Serum Albumin
Storage	Store at +4°C or at -20°C if preferred. This product should be stored undiluted. Storage in frost-free freezers is not recommended. This product is photosensitive and should be

protected from light.

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	Cd4 CD4 antigen [Mus musculus (house mouse)]
Official Symbol	Cd4
Synonyms	Cd4; CD4 antigen; 3T4; Ly-4; T-cell surface glycoprotein CD4; T-cell surface antigen T4/Leu-3; T-cell differentiation antigen L3T4; T-cell surface glycoprotein CD4 precursor (T-cell surface antigen T4/Leu-3) (T-cell differentiation antigen L3T4)
Entrez Gene ID	12504
mRNA Refseq	NM_013488
Protein Refseq	NP_038516
UniProt ID	P06332
Chromosome Location	6 F2; 6 59.17 Cm
Pathway	Adaptive Immune System; Alpha-defensins; Antigen processing and presentation; Cell adhesion molecules (CAMs); Costimulation by the CD28 family; Cytokines and Inflammatory Response (BioCarta); Defensins; Downstream TCR signaling; Generation of second messenger molecules; Hematopoietic cell lineage; Immune System; Innate Immune System; PD-1 signaling; Phosphorylation of CD3 and TCR zeta chains; Primary immunodeficiency; T Cell Receptor Signaling Pathway; T cell receptor signaling pathway; TCR sign
Function	coreceptor activity; enzyme binding; glycoprotein binding; protein binding; protein homodimerization activity; protein kinase binding; zinc ion binding
References	1. Cobbold, S.P. et al. (1990) The induction of skin graft tolerance in MHC-mismatched or primed recipients: primed T cells can be tolerized in the periphery with CD4 and CD8 antibodies. Eur. J. Immunol. 20: 2747-2755. 2. Bemelman, F. et al. (1998) Bone marrow transplantation induces either clonal deletion or infectious tolerance depending on the dose. J. Immunol. 160: 2645-2648. 3. Higgins, L. M. et al. (1999) Regulation of T cell activation in vitro and in vivo by targeting the OX40-OX40 Ligand Interaction: Amelioration of ongoing inflammatory bowel disease with an OX40-IgG fusion protein, but not with an OX40 ligand - IgG fusion protein. J. Immunol. 162: 486 - 493.