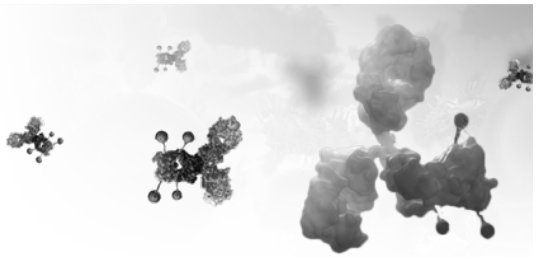

Rat Anti-Mouse CD4 Monoclonal antibody, clone GK1.5 (CABT-L4314)

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

PRODUCT INFORMATION

Product Overview	The GK1.5 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 CTL clone V4
Isotype	IgG2b, κ
Source/Host	Rat
Species Reactivity	Mouse
Clone	GK1.5
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	in vivo CD4+ T cell depletion, FC, 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 6.5. Contains no stabilizers or preservatives. [low endotoxin azide-free]

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	Endotoxin level: <1EU/mg (<0.001EU/μg). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB02
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 GK1.5 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 GK1.5 antibody has been shown to compete with clones YTS 177 and YTS 191 for CD4 binding.
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	Balogh, K. N., et al. (2018). "Macrophage Migration Inhibitory Factor protects cancer cells from immunogenic cell death and impairs anti-tumor immune responses." PLoS One 13(6): e0197702. PubMed;Zander, R. A., et al. (2015). "PD-1 Co-inhibitory and OX40 Co-stimulatory Crosstalk Regulates Helper T Cell Differentiation and Anti-Plasmodium Humoral Immunity." Cell Host Microbe 17(5): 628-641. PubMed;Church, S. E., et al. (2014). "Tumor-specific CD4+ T cells maintain effector and memory tumor-specific CD8+ T cells." Eur J Immunol 44(1): 69-79. PubMed;Krupnick, A. S., et al. (2014). "Central memory CD8+ T lymphocytes mediate lung allograft acceptance." J Clin Invest 124(3): 1130-1143. PubMed;Uddin, M. N., et al. (2014). "TNF-alpha-dependent hematopoiesis following Bcl11b deletion in T cells restricts metastatic melanoma." J Immunol 192(4): 1946-1953. PubMed

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