Leinco Technologies, Inc.
excellence in early discovery research™

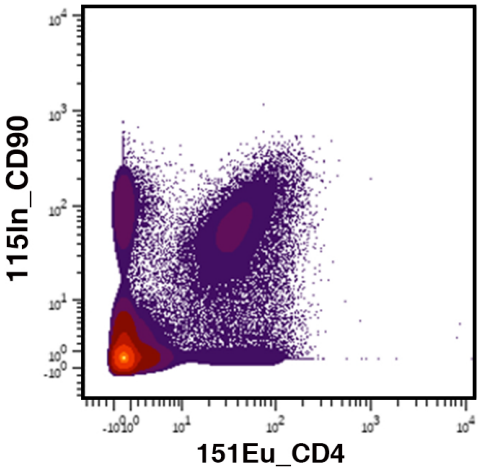
Mouse CD4 Antibody

Purified *in vivo* PLATINUM™ Functional Grade

Monoclonal Antibody

Product Information

Product No.:	C2838
Clone:	GK1.5
RRID:	AB_2829596
Isotype:	Rat IgG2b κ
Storage:	Sterile 2° to 8°C



CyTOF™ Data: Staining of a Murine Spleen was stained after using a metal conjugation kit to clone GK1.5, Anti-Mouse CD4 above.

Product Description

Specificity:
Rat Anti-Mouse CD4 antibody [Clone GK1.5] recognizes an epitope on Mouse CD4. This monoclonal antibody was purified using multi-step affinity chromatography methods such as Protein A or G depending on the species and isotype. This antibody was also pathogen tested and third-party certified by IDEXX BioReseach to meet the lowest mycoplasma specification and free of any viral pathogens of concern.

Antigen Distribution:
The CD4/L3T4 antigen is expressed by the helper/inducer subset of mouse T-cells. The antigen is present on approximately 80% of thymocytes, 20% of spleen cells and 60% of lymph node cells. The expression of L3T4 correlates with class II MHC antigen reactivity on cloned T-cell lines.

Background:
CD4 (cluster of differentiation 4) is a glycoprotein expressed on the surface of T helper cells, regulatory T cells, monocytes, macrophages, and dendritic cells. CD4 interacts with class II molecules of the major histocompatibility complex (MHC) enhancing the signal for T-cell activation.[6]

Known Reactivity Species:
Mouse

Format:
Purified *in vivo* PLATINUM™ Functional Grade

Immunogen:
Mouse CTL clone V4

Formulation
This monoclonal antibody is aseptically packaged and formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.2 - 7.4 with no carrier protein, potassium, calcium or preservatives added. Due to inherent biochemical properties of antibodies, certain products may be prone to precipitation over time. Precipitation may be removed by aseptic centrifugation and/or filtration.

Purity
≥98% monomer by analytical SEC, >95% by SDS Page

Endotoxin
<0.5 EU/mg as determined by the LAL method

Storage and Stability
Functional grade preclinical antibodies may be stored sterile as received at 2° to 8°C for up to one month. For longer term storage, aseptically aliquot in working volumes without diluting and store at ≤ -70°C.

Avoid Repeated Freeze Thaw Cycles

Product Preparation
Functional grade preclinical antibodies are manufactured in an animal free facility using in vitro cell culture techniques and are purified by a multi-step process including the use of protein A or G to assure extremely low levels of endotoxins, leachable protein A or aggregates.

Pathogen Testing
To protect mouse colonies from infection by pathogens and to assure that experimental preclinical data is not affected by such pathogens, all of Leinco's Purified Functional PLATINUM™ antibodies are tested and guaranteed to be negative for all pathogens in the IDEXX IMPACT I Mouse Profile.

Applications
Applications and Recommended Usage (Quality Tested By Leinco):

CyTOF®
FC The suggested concentration for this GK1.5 antibody for staining cells in flow cytometry is ≤ 1.0 µg per 106 cells in a volume of 100 µl. Titration of the reagent is recommended for optimal performance for each application.

Other Applications Reported in Literature:
B
Costim
Depletion
IHC
IP

Country of Origin
USA

References
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4) Shin, H. *et al.* (2018) *J Virol.* **92**(7): e00038-18. PubMed
5) Chiang, BL. *et al.* (2001) *Immunology.* 2001 **103**(3): 301–309. PubMed
6) Hendrickson, WA. *et al.* (1994) *Structure* **2**: 59 7.)
7) Skyberg, J. A. *et al.* (2020) *Infection and Immunity.* **88**: 5 Journal Link
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