

# Mouse CD4 Antibody

Purified in vivo GOLD™ Functional Grade

Monoclonal Antibody

## Product Information

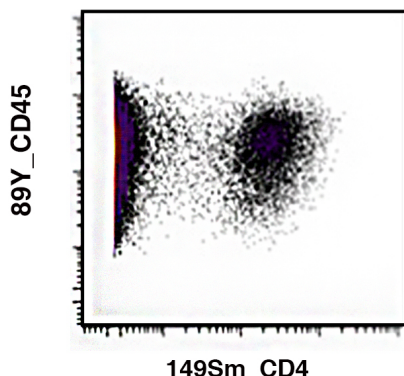
Product No.: C1333

Clone: GK1.5

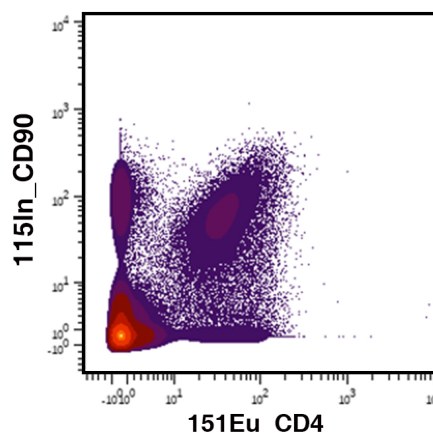
RRID: AB\_2737452

Isotype: Rat IgG2b  $\kappa$

Storage: Sterile 2-8°C



**CyTof™ Data:** A single cell suspension from a 129 S6 murine tumor were stained after using Fluidigm Metal Labeling Kits to conjugate antibody clone GK1.5 (mouse CD4) & Clone I3/2.3 (mouse CD45) above. Total CD45+ viable cells are displayed in the analysis.



**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 CD4 antibody was purified using multi-step affinity chromatography methods such as Protein A or G depending on the species and isotype.

### Antigen Distribution:

Majority of thymocytes, T cell subset

### 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.<sup>6</sup>

### Known Reactivity Species:

Mouse

### Format:

Purified in vivo GOLD™ Functional Grade

### Immunogen:

Mouse CTL clone V4

### Formulation

This monoclonal CD4 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**

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

**Endotoxin**

< 1.0 EU/mg as determined by the LAL method

**Storage and Stability**

Functional grade preclinical antibodies may be stored sterile as received at 2-8°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.

**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 10<sup>6</sup> 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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- 2.) Schreiber, RD. *et al.* (2017) *Cancer Immunol Res.* **5**(2):106-117. [PubMed](#)
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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.) Skyberg, J. A. *et al.* (2020) *Infection and Immunity.* **88**: 5 [Journal Link](#)
- 8.) Raju *et al.* (2019) *Cell Reports.* **29**:2556–2564 [Journal Link](#)
- 9.) Gubin, M. *et al.* (2018) *Cell.* **175**(4):1014–1030 [Journal Link](#)
- 10.) Sharma S. *et al.* (2020) *Human Vaccines & Immunotherapeutics* **16**(9):2196-2203 [Journal Link](#)
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