

CD4 mAb (GK1.5), InVivoPure

Endotoxin level ≤ 2 EU/mg

Description:

The CD4 monoclonal antibody (clone GK 1.5) was purified from supernatant of TIB-207™ GK1.5 from the ATCC.*

The GK1.5 monoclonal antibody reacts with the mouse CD4 molecule, a 55 kDa cell surface receptor expressed by a majority of thymocytes, subpopulation of mature T cells and dendritic cells. CD4 binds to MHC class II on the surface of antigen presenting cells and plays an important role both in T cell development and in optimal functioning of mature T cells. In T cells, CD4 associates with protein tyrosine kinase p56lck through its cytoplasmic tail. Binding of GK1.5 is blocked using the RM4-5 antibody by competing with GK1.5 for the same binding site on the CD4 molecule. GK1.5 significantly enhanced the percentages of peripheral CD4⁺CD25⁺Foxp3⁺ Treg cells in CD4⁺ T cells in mice without altering their immunosuppressive function [1].

The antibody profoundly blocks antigen specific murine class II MHC antigen reactive helper T lymphocyte lines [2].

This antibody is produced exclusively under serum-free conditions from hybridoma and purified with Protein-A or Protein-G affinity chromatography.

Product-ID:	AK3602P
Clone:	GK1.5
Immunogen:	Animals were immunized with the cloned cytotoxic T lymphocyte lines V4 and 243/2.5. L3T4 is expressed on mouse helper/inducer T cells and is analogous to the human Leu-3/T4 molecule.
Host:	Rat
Clonality:	Monoclonal
Isotype:	IgG2b κ
Formulation:	Clear Liquid, PBS, pH 7.4, 0.2 μ m sterile filtered
Concentration:	≥ 1 mg/mL
Purity:	≥ 90 % (CGE, reducing conditions) ≤ 10 % aggregates (analytical SEC)
Endotoxin:	≤ 2 EU/mg (LAL test)
Storage:	2 - 8 °C

The product is for research use only and not for use in diagnostic or therapeutic procedures.

***The ATCC trademark and trade name and any and all ATCC catalog numbers are trademarks of the American Type Culture Collection.**

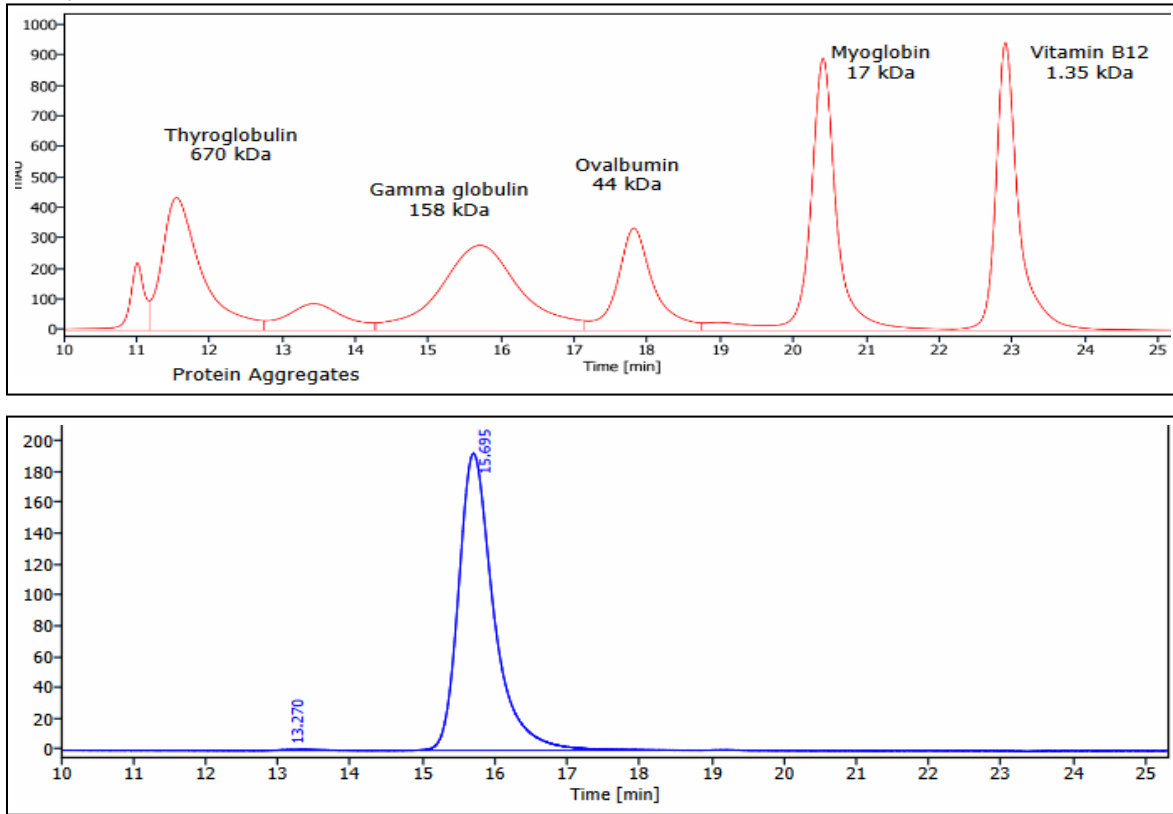
InVivo BioTech Services GmbH is certified to [ISO 9001](#) and [ISO 13485](#).

Literature:

- [1] Yi H, Zhen Y, Zeng C, Zhang L, Zhao Y. Depleting anti-CD4 monoclonal antibody (GK1.5) treatment: influence on regulatory CD4+CD25+Foxp3+ T cells in mice. Transplantation. 2008 Apr 27;85(8):1167-74. doi: 10.1097/TP.0b013e31816a1242. PMID: 18431238.
- [2] Wilde DB, Marrack P, Kappler J, Dialynas DP, Fitch FW. Evidence implicating L3T4 in class II MHC antigen reactivity; monoclonal antibody GK1.5 (anti-L3T4a) blocks class II MHC antigen-specific proliferation, release of lymphokines, and binding by cloned murine helper T lymphocyte lines. J Immunol. 1983 Nov;131(5):2178-83. PMID: 6195255.

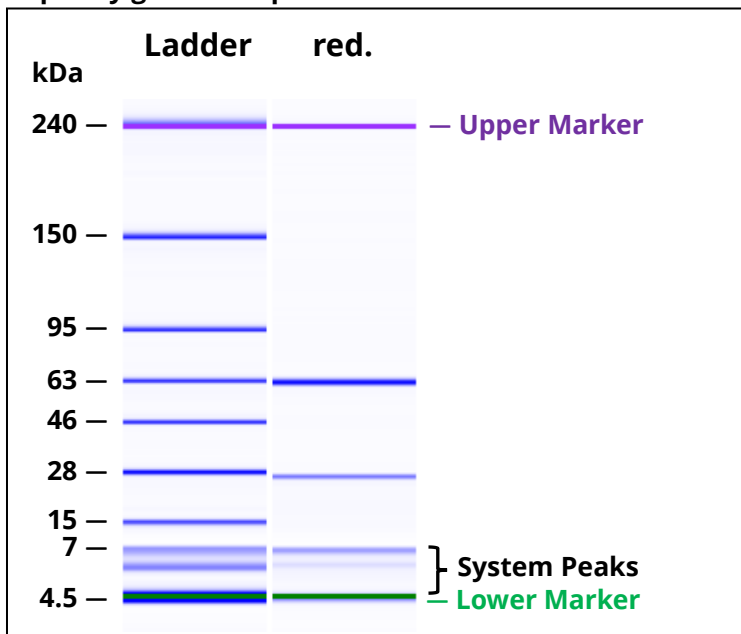
**CD4 mAb (GK 1.5), InVivoPure
— Supplementary Data**

Analytical SEC:



Analytical SEC of purified protein (blue) in comparison with gel filtration standard (red).

Capillary gel electrophoresis:



CGE of the purified protein under reducing (red.) conditions.