

CD71 mAb (B3/25), InVivoPure

Endotoxin level ≤ 2 EU/mg

Description:

The anti-CD71 monoclonal antibody (clone B3/25) was purified from supernatant of CRL-8034™ B3/25 from the ATCC.*

The B3/25 antibody targets the human CD71 protein (transferrin receptor), which is critical for cell proliferation and iron uptake. It reduces transferrin binding sites without inhibiting binding and can inhibit the proliferation of human myeloid leukemia cells [1]. In vivo, it suppresses the growth of human melanoma M21 xenografts [2].

B3/25 also interacts with vitronectin receptors on neutrophils, blocking binding to Arg-Gly-Asp (RGD) and inhibiting RGD-stimulated phagocytosis [3]. It precipitates a heterodimer with molecular weights of 140,000 and 105,000 daltons and does not react with gpIIb/III or LFA-1/Mac-1 receptors.

In addition, B3/25 reacts with an acidic glycoprotein on immature and proliferating hematopoietic cells, HeLa cells, and other tumor cell lines, but not on normal human tissues such as brain, kidney, and liver [4].

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

Product-ID:	AK3641P
Clone:	B3/25
Immunogen:	Animals were immunized with K-562 cells
Host:	Mouse
Clonality:	Monoclonal
Isotype:	Mouse IgG1
Formulation:	Clear Liquid, PBS, pH 7.4, 0.2 μ m sterile filtered
Concentration:	≥ 1.00 mg/mL
Purity:	≥ 90 % (CGE, reducing conditions) ≤ 10 % aggregates (analytical SEC)
Endotoxin:	≤ 2 EU/mg (LAL test)
Storage:	2 - 8 °C
Recommended Isotype Control:	Mouse IgG1 κ Isotype Control (AK3421P)

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.**

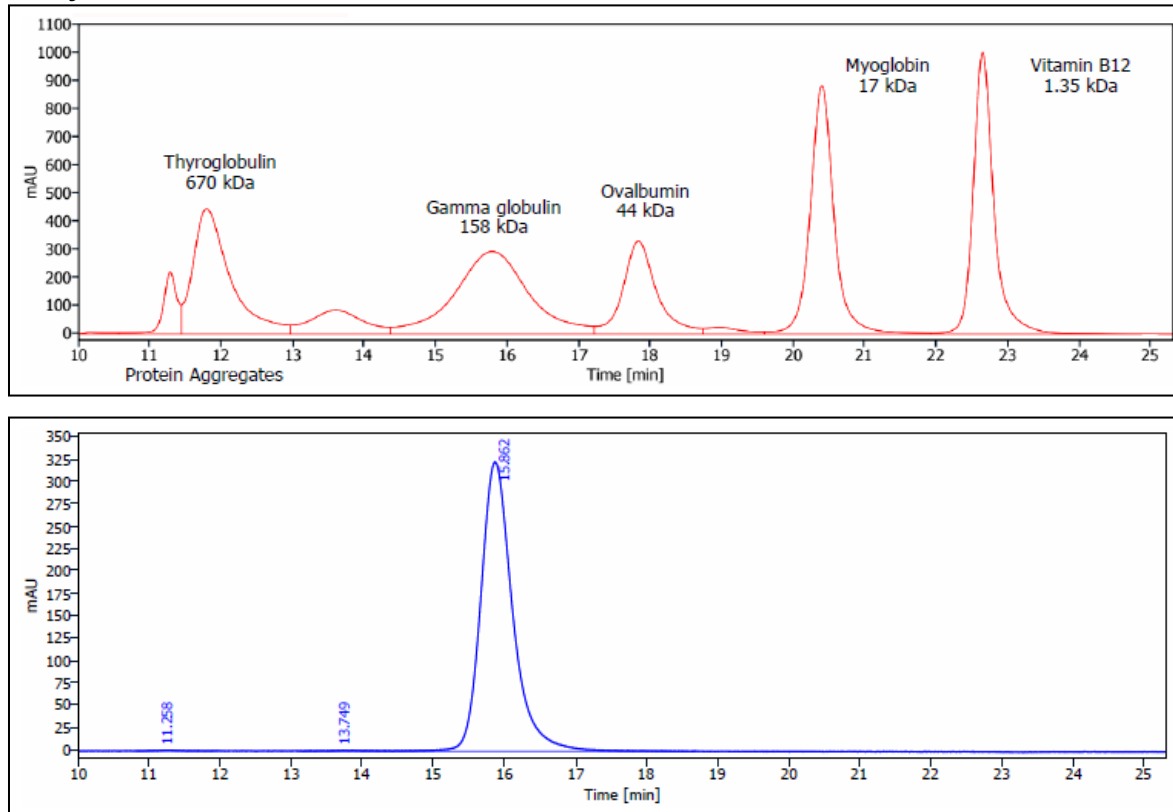
InVivo BioTech Services GmbH is certified to [ISO 9001](#) and [ISO 13485](#).

Literature:

- [1] Taetle R, Castagnola J, Mendelsohn J. Mechanisms of growth inhibition by anti-transferrin receptor monoclonal antibodies. Cancer Res. 1986 Apr;46(4 Pt 1):1759-63. PMID: 3004704.
- [2] Trowbridge IS, Domingo DL. Anti-transferrin receptor monoclonal antibody and toxin-antibody conjugates affect growth of human tumour cells. Nature. 1981 Nov 12;294(5837):171-3. doi: 10.1038/294171a0. PMID: 6272120.
- [3] Lee G. Dual Differential Roles of Cancerous Immunoglobulins as Suggested by Interactions with Human Serum Proteins. J Clin Cell Immunol. 2015;6(385):2.
- [4] Dong HY, Wilkes S, Yang H. CD71 is selectively and ubiquitously expressed at high levels in erythroid precursors of all maturation stages: a comparative immunochemical study with glycophorin A and hemoglobin A. Am J Surg Pathol. 2011 May;35(5):723-32. doi: 10.1097/PAS.0b013e31821247a8. PMID: 21415701.

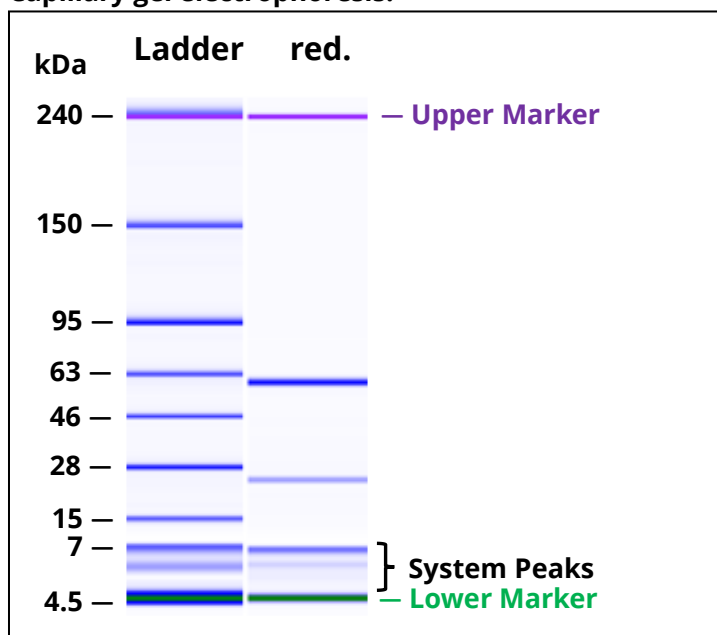
CD71 mAb (B3/25), InVivoPure — Supplementary Data

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.