# CD47 mAb (B6H12.2), InVivoPure

Endotoxin level ≤ 2 EU/mg

**Description**:

**The anti-CD47 monoclonal antibody (clone B6H12.2) was purified from supernatant of HB-9771™ B6H12.2 from the ATCC.***

CD47 (also known as Integrin-Associated Protein, IAP) is a ubiquitously expressed transmembrane protein involved in immune evasion by sending a "don't eat me" signal via its interaction with SIRPα on macrophages. It plays a critical role in tumor immune evasion, self-recognition, and apoptosis regulation.
The B6H12.2 antibody is a mouse monoclonal that specifically binds to human CD47. It has been widely cited in both in vitro and in vivo studies, including for blockade of CD47–SIRPα signaling to enhance phagocytosis of tumor cells. [1].
In addition to its primary function, the anti-CD47 mAb blocks the association between CD47, TSP1 (Thrombospondin 1) and integrin αvβ3 that promotes vitronectin-associated spreading of melanoma cells [2]. The antibody reacts with vitronectin receptors on human polymorphonuclear leukocytes (PMN, neutrophils) and effectively blocks the receptor binding to the tripeptide Arg-Gly-Asp (RGD). This inhibition extends to RGD-stimulated phagocytosis, demonstrating its functional versatility.
Importantly, B6H12.2 does not react with gpIIb/III or the LFA-1/Mac-1 family of cellular adhesion receptors, ensuring targeted specificity [3].
Widely used in immunological assays such as immunohistochemistry and flow cytometry, B6H12.2 is a reliable tool for researchers studying CD47-expressing cells.
This antibody is produced exclusively under serum-free conditions by hybridoma and purified with Protein-A or Protein-G affinity chromatography.

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| **Product-ID:** | **AK3640P** |
| **Clone:** | B6H12.2 |
| **Immunogen:** | Animals were immunized with purified integrin associated protein (IAP, which is physically and functionally associated with vitronectin receptors). |
| **Host:** | Mouse |
| **Clonality:** | Monoclonal |
| **Isotype:** | Mouse IgG1 |
| **Formulation:** | Clear Liquid, PBS, pH 7.4, 0.2 µm sterile filtered |
| **Concentration:** | ≥ 1.00 mg/mL |
| **Purity:** | ≥ 90 % (CGE, reducing conditions)<br>≤ 10 % aggregates (analytical SEC) |
| **Endotoxin:** | ≤ 2 EU/mg (LAL test) |
| **Storage:** | 2 - 8 °C |
| **Recommended Isotype Control:** | Mouse IgG1 κ Isotype Control (AK3421P) |

IVS CS-0129, Rev. 02

**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] Li W, Wang F, Guo R, Bian Z, Song Y. Targeting macrophages in hematological malignancies: recent advances and future directions. J Hematol Oncol. 2022 Aug 17;15(1):110. doi: 10.1186/s13045-022-01328-x. PMID: 35978372; PMCID: PMC9387027.

[2] Gao AG, Lindberg FP, Dimitry JM, Brown EJ, Frazier WA. Thrombospondin modulates alpha v beta 3 function through integrin-associated protein. J Cell Biol. 1996 Oct;135(2):533-44. doi: 10.1083/jcb.135.2.533. PMID: 8896608; PMCID: PMC2121041.

[3] Brown, E. J; Washington University in St Louis WUSTL, Monoclonal antibodies. United States patent U.S. 6,111,080. 2000 Aug 29.

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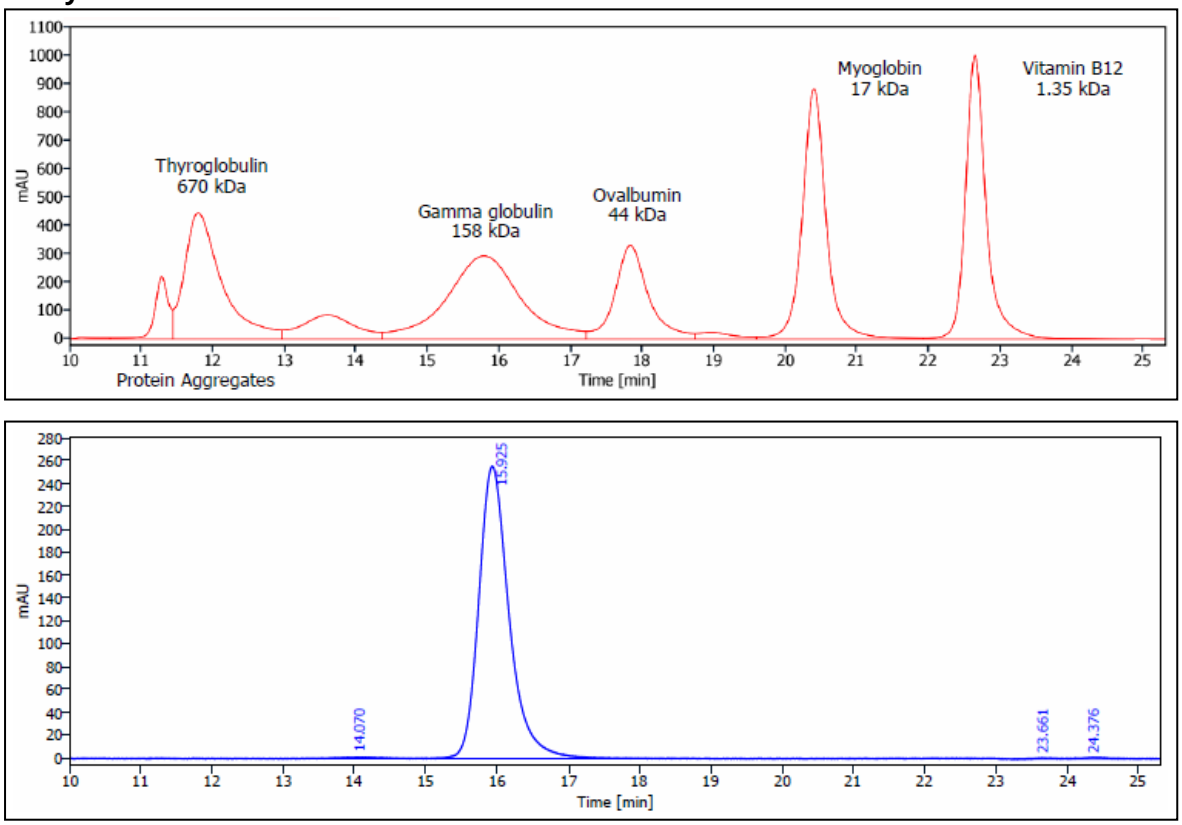
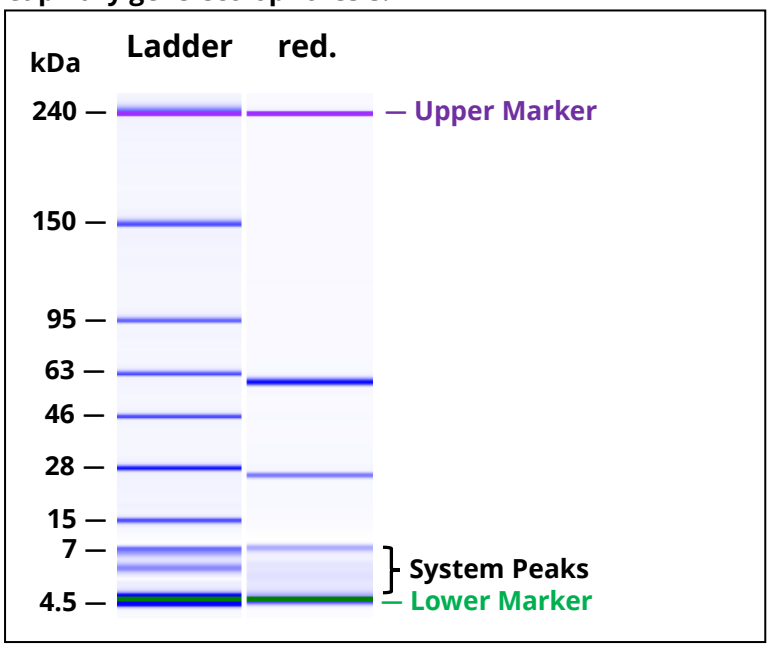
# — Supplementary Data

**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.*