PRODUCT INFORMATION



CD47 mAb (B6H12.2), InVivoPure+

Endotoxin level \leq 1 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–SIRP α 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 $\alpha\nu\beta3$ 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.

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
lsotype:	Mouse IgG1
Formulation:	Clear Liquid, PBS, pH 7.4, 0.2 μm sterile filtered
Concentration:	≥ 1.00 mg/mL
Purity:	≥ 95 % (CGE, reducing conditions)
	\leq 5 % aggregates (analytical SEC)
Endotoxin:	≤ 1 EU/mg (LAL test)
Storage:	2 - 8 °C
Recommended Isotype Control:	Mouse lgG1 к lsotype Control (АКЗ421P+)

PRODUCT INFORMATION



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 <u>ISO 9001</u> and <u>ISO 13485</u>.

Literature:

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

PRODUCT INFORMATION



CD47 mAb (B6H12.2), 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.