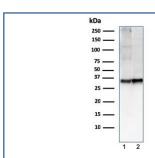


# CD47 Antibody / IAP [clone CD47/2937] (V7536)

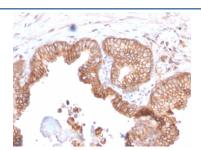
Catalog No.	Formulation	Size
V7536-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7536-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7536SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7536IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

## **Bulk quote request**

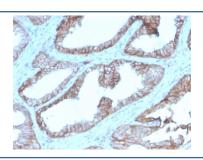
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2c, kappa
Clone Name	CD47/2937
Purity	Protein G affinity chromatography
UniProt	Q08722
Localization	Cell surface, cytoplasmic
Applications	ELISA: order BSA/sodium azide-free format for coating Western Blot: 1-2ug/ml for 60 min at RT Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This CD47 antibody is available for research use only.



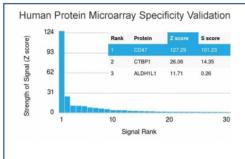
Western blot testing of human 1) U-87 MG and 2) ThP-1 cell lysate with CD47 antibody (clone CD47/2937). Expected molecular weight: 35~60 kDa depending on glycosylation level.



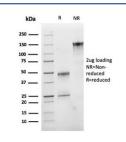
IHC staining of FFPE human prostate carcinoma with CD47 antibody (clone CD47/2937). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.



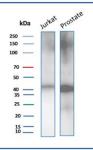
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Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using CD47 antibody (clone CD47/2937). These results demonstrate the foremost specificity of the CD47/2937 mAb.<BR>Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD&#39;s) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD&#39;s) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free CD47 antibody (clone CD47/2937) as confirmation of integrity and purity.



Western blot testing of human Jurkat cell lysate and prostate tissue lysate with CD47 antibody (clone CD47/2937). Expected molecular weight: 35~60 kDa depending on glycosylation level.

## **Description**

CD47 antibody detects CD47, a ubiquitously expressed transmembrane protein encoded by the CD47 gene. CD47 is a member of the immunoglobulin superfamily and interacts with integrins, thrombospondin-1, and the immune receptor signal regulatory protein alpha (SIRPα). Its role as a "don't eat me― signal makes it a key regulator of immune evasion, particularly in cancer. Because CD47 influences apoptosis, adhesion, and innate immunity, CD47 antibody is widely used in oncology, immunology, and stem cell research.

Structurally, CD47 consists of a single extracellular Ig-like domain, five transmembrane segments, and a short cytoplasmic tail. By binding to SIRPα on macrophages, CD47 delivers inhibitory signals that prevent phagocytosis. This mechanism is exploited by tumors, where CD47 is often overexpressed to avoid immune clearance. In normal physiology, CD47 modulates integrin signaling, regulating cell migration, adhesion, and angiogenesis. It also interacts with thrombospondin-1 to influence vascular tone and cellular stress responses.

The CD47 antibody clone CD47/2937 provides reliable and specific recognition. Clone CD47/2937 has been cited in peer-reviewed studies investigating immune checkpoint pathways, cancer therapy, and hematopoietic stem cell biology. Its reproducibility makes it suitable for flow cytometry, immunohistochemistry, and functional assays that measure receptor distribution and activity.

Research using clone CD47/2937 has demonstrated that CD47 expression correlates with poor prognosis in several cancers, including leukemia, lymphoma, and solid tumors. Targeting CD47 with blocking antibodies enhances macrophage-mediated phagocytosis of cancer cells, providing the basis for experimental immunotherapies. Beyond oncology, CD47 detection is used to study vascular biology, platelet homeostasis, and neural cell signaling. Its diverse functions highlight the broad value of this antibody in biomedical research.

NSJ Bioreagents provides this CD47 antibody to support studies in oncology, immunology, and vascular biology. Alternate terms include integrin-associated protein antibody, IAP antibody, OA3 antigen antibody, SIRPα ligand antibody, and don't eat me signal antibody.

### **Application Notes**

Optimal dilution of the CD47 antibody should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

### **Immunogen**

Amino acids 18-135 from the human protein were used as the immunogen for the CD47 antibody.

#### **Storage**

Store the CD47 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).