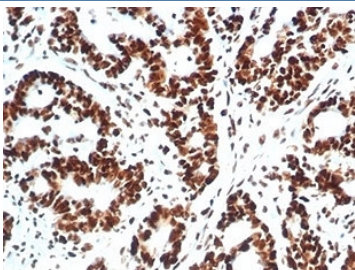


Ku80 Antibody / Cancer Biomarker Antibody [clone XRCC5/7317] (V9740)

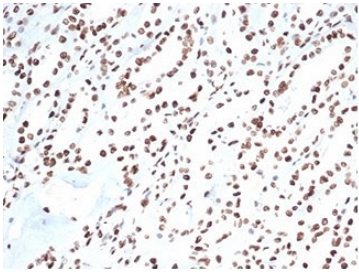
Catalog No.	Formulation	Size
V9740-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9740-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9740SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

[Bulk quote request](#)

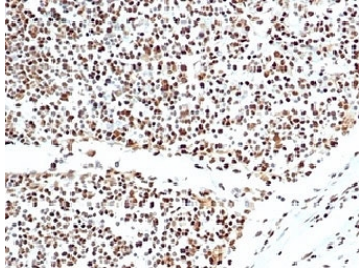
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	XRCC5/7317
Purity	Protein A/G affinity
UniProt	P13010
Localization	Nucleus
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This Ku80 antibody is available for research use only.



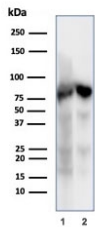
Ku80 Antibody / Cancer Biomarker Antibody. Immunohistochemistry analysis of human colon carcinoma tissue using Ku80 antibody clone XRCC5/7317. Formalin-fixed, paraffin-embedded sections show strong HRP-DAB brown nuclear staining in tumor epithelial cells, with minimal staining in surrounding stromal regions. The nuclear localization is consistent with Ku80 (XRCC5) expression and reflects increased DNA repair activity in malignant cells. The staining is prominent within gland-forming tumor structures, supporting the relevance of Ku80 as a cancer-associated biomarker linked to tumor proliferation and genomic stress. Hematoxylin counterstain highlights nuclei (blue), providing contrast to the Ku80-positive nuclear signal.



IHC staining of FFPE human kidney tissue with Ku80 antibody (clone XRCC5/7317).
HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Ku80 Antibody / Cancer Biomarker Antibody. Immunohistochemistry analysis of human lymph node tissue using Ku80 antibody clone XRCC5/7317. Formalin-fixed, paraffin-embedded sections show widespread HRP-DAB brown nuclear staining across the lymphoid cell population, consistent with Ku80 (XRCC5) expression in proliferative immune cells. The strong and uniform nuclear signal reflects active DNA repair processes associated with rapid cellular turnover. Hematoxylin counterstain highlights nuclei (blue), providing contrast to the Ku80-positive nuclear staining pattern and supporting its relevance as a biomarker in highly proliferative tissues.



Ku80 Antibody / Cancer Biomarker Antibody for WB. Western blot analysis of Ku80 (XRCC5) in human cell lysates. Lane 1: MOLT-4 cell lysate, Lane 2: HEK293 cell lysate. A band is detected at approximately 80-86 kDa, consistent with the predicted molecular weight of Ku80 (XRCC5). The presence of Ku80 across both lymphoid-derived and epithelial-derived cell lines supports its widespread expression in cancer-relevant cell types and aligns with its role as a DNA repair protein associated with tumor cell survival and genomic stress response.

Description

Ku80 (XRCC5) is a DNA repair protein that is widely recognized for its involvement in tumor biology, where it contributes to cancer cell survival, genomic instability, and resistance to therapy. Ku80 Antibody is uniquely positioned for studies focused on cancer biomarkers, enabling detection of a DNA repair protein that plays a central role in how tumor cells respond to genotoxic stress. As part of the Ku heterodimer with Ku70 (XRCC6), Ku80 facilitates repair of DNA double-strand breaks, a process that cancer cells often exploit to maintain viability under conditions of high DNA damage.

Ku80 Antibody is uniquely positioned for investigating tumor-associated DNA repair mechanisms and their contribution to disease progression. Ku80 antibody, also known as XRCC5 antibody, detects a nuclear protein that is frequently upregulated in malignant tissues and associated with increased DNA repair capacity. This enhanced repair capability allows tumor cells to survive exposure to radiation and DNA-damaging chemotherapeutic agents, making Ku80 a key factor in therapeutic resistance.

In many cancer types, elevated Ku80 expression correlates with aggressive tumor behavior, increased proliferation, and poor clinical outcomes. Its role in maintaining genome integrity under stress conditions makes it a valuable marker for assessing tumor resilience and adaptability. Detection of Ku80 can provide insight into how cancer cells balance DNA damage accumulation with repair processes, and how these mechanisms influence treatment response.

Ku80 is also relevant in studies examining tumor heterogeneity, where differences in DNA repair capacity can exist within a single tumor population. Monitoring Ku80 expression across different cell populations can reveal variations in repair efficiency and susceptibility to therapy. This makes it a useful tool for investigating mechanisms of tumor evolution and resistance.

As a member of the DNA repair protein family, Ku80 interacts with DNA-dependent protein kinase and other repair components to sustain tumor cell survival. Its role in enabling repair under stress conditions makes it particularly

important in oncology research. Ku80 Antibody provides a focused tool for studying cancer-associated DNA repair processes, tumor progression, and mechanisms of resistance to treatment.

Application Notes

Optimal dilution of the Ku80 antibody should be determined by the researcher.

Immunogen

A portion of amino acids 300-500 was used as the immunogen for the Ku80 Antibody / Cancer Biomarker Antibody.

Storage

Aliquot the Ku80 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

XRCC5 antibody, Ku80 cancer marker antibody, Ku80 tumor biomarker antibody, XRCC5 oncology antibody, Ku80 cancer research antibody