

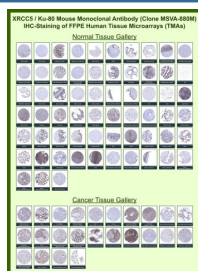
## Ku80 Antibody for IHC / XRCC5 Immunohistochemistry Antibody [clone MSVA-880M] (V6131)

Catalog No.	Formulation	Size
V6131-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6131-20UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug

Recombinant **MOUSE MONOCLONAL**

[Bulk quote request](#)

<b>Species Reactivity</b>	Human
<b>Format</b>	Purified
<b>Host</b>	Mouse
<b>Clonality</b>	Recombinant Mouse Monoclonal
<b>Isotype</b>	Mouse IgG1, kappa
<b>Clone Name</b>	MSVA-880M
<b>UniProt</b>	P13010
<b>Localization</b>	Nucleoplasm, Nucleus
<b>Applications</b>	Immunohistochemistry (FFPE) : 1:100-1:200
<b>Limitations</b>	This XRCC5/Ku80 antibody is available for research use only.



Ku80 Antibody for IHC Tissue Microarray (TMA). Immunohistochemistry analysis of X-ray repair cross complementing protein 5 XRCC5, also known as Ku80, in formalin-fixed paraffin-embedded human normal and cancer tissue microarrays using recombinant mouse monoclonal Ku80 antibody clone MSVA-880M. Tissue microarray (TMA) staining with HRP-DAB brown chromogen demonstrates widespread nuclear localization across epithelial, stromal, and lymphoid cell populations, consistent with the role of Ku80 in DNA double-strand break repair. Within tumor tissue microarrays, increased nuclear staining intensity is observed in proliferative and malignant tissues, reflecting elevated DNA repair activity, while normal tissues show cell-type-dependent expression levels. Evaluation across large TMA panels enables direct comparison of XRCC5 expression across diverse tissue types under standardized conditions. The observed staining patterns align with reported XRCC5 expression profiles in publicly available datasets including the Human Protein Atlas.

### Description

Ku80 (XRCC5) is a nuclear protein widely expressed across human tissues and is readily detectable in formalin-fixed,

paraffin-embedded tissue sections, making it highly suitable for immunohistochemistry-based analysis. Ku80 Antibody for IHC is specifically designed for immunohistochemistry applications, enabling clear visualization of XRCC5 expression and nuclear staining patterns in tissue sections. This antibody supports evaluation of protein distribution across normal and diseased tissues, allowing direct comparison of staining within intact tissue architecture.

Ku80 Antibody for IHC is uniquely positioned for tissue-based studies where preservation of morphology and cellular context is essential. XRCC5 antibody, also known as Ku80 antibody, produces predominantly nuclear HRP-DAB brown staining in epithelial, stromal, and lymphoid cell populations, consistent with its intracellular localization. In immunohistochemistry analysis, staining is typically observed as distinct nuclear signal, allowing clear identification of positive cells within complex tissue environments and across diverse histological structures.

In tumor tissues, Ku80 Antibody for IHC frequently shows strong nuclear staining in malignant cell populations, often with higher intensity compared to surrounding non-neoplastic tissue. This contrast supports its use in studies comparing tumor versus normal expression patterns and provides insight into differences in cellular activity within the tumor microenvironment. In normal tissues, staining is generally more uniform and consistent across cell types, reflecting baseline XRCC5 expression and allowing reliable interpretation of tissue-specific distribution.

In human tissue microarray (TMA) analysis, Ku80 Antibody for IHC demonstrates consistent nuclear staining across a broad panel of normal and cancer tissues, including epithelial, lymphoid, and glandular compartments. The widespread yet cell-type-dependent staining intensity highlights the utility of XRCC5 detection for comparative tissue analysis, where differences between normal and malignant tissues can be readily observed. This reproducible staining across diverse tissue cores supports reliable evaluation of XRCC5 expression in large-scale tissue screening studies.

The recombinant mouse monoclonal format supports consistent staining performance and low background in FFPE specimens, enabling clear signal detection and reproducible results across experiments. Ku80 Antibody for IHC provides strong nuclear staining with minimal non-specific signal, allowing accurate differentiation between positive and negative cells in complex tissue environments. This level of clarity is particularly important for histological evaluation and interpretation of staining patterns in research settings.

Ku80 Antibody for IHC provides a focused tool for tissue-level analysis of XRCC5 expression, enabling detailed examination of nuclear localization within intact tissue architecture. Its consistent nuclear staining, reproducibility across tissue types, and ability to highlight differences between normal and cancer tissues make it well suited for immunohistochemistry studies requiring clear, interpretable, and biologically meaningful staining patterns.

This antibody is part of a broader collection of [IHC antibodies validated by tissue microarray analysis](#), supporting consistent staining across normal and cancer tissues.

For studies focused on XRCC6-associated DNA end recognition and double-strand break repair signaling, see our [Ku70 Antibody / DNA End Binding Protein Antibody](#) page featuring IHC and western blot validation data across multiple tumor types and human cell lines.

## Application Notes

1. Optimal dilution of the Ku80 Antibody for IHC / XRCC5 Immunohistochemistry Antibody should be determined by the researcher.
2. This XRCC5/Ku80 antibody is recombinantly produced by expression in CHO cells.
3. Manual Protocol: Freshly cut sections should be used (less than 10 days between cutting and staining). Heat-induced antigen retrieval for 5 minutes in an autoclave at 121°C in pH 7.8 Target Retrieval Solution buffer. Apply the antibody at a dilution of 1:150 at 37°C for 60 minutes. Visualization of bound antibody by the EnVision Kit (Dako, Agilent) according to the manufacturer's directions.

## **Immunogen**

A recombinant fragment (around amino acids 300-500) of human XRCC5 (exact sequence is proprietary) was used as the immunogen for the Ku80 Antibody for IHC / XRCC5 Immunohistochemistry Antibody.

## **Storage**

XRCC5/Ku80 antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.

## **Alternate Names**

XRCC5 IHC antibody, Ku80 immunohistochemistry antibody, XRCC5 tissue staining antibody, Ku80 FFPE antibody, XRCC5 tumor marker IHC antibody