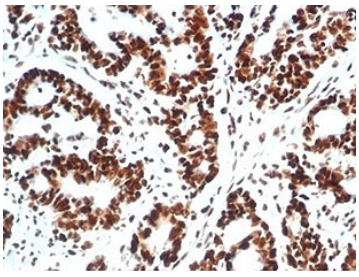
Ku80 Antibody / XRCC5 [clone XRCC5/7317] (V9740)

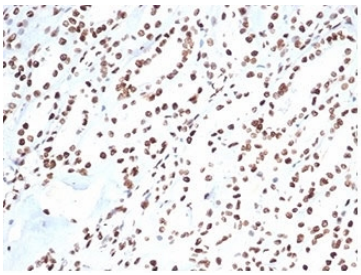
Catalog No.	Formulation	Size
V9740-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9740-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9740SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

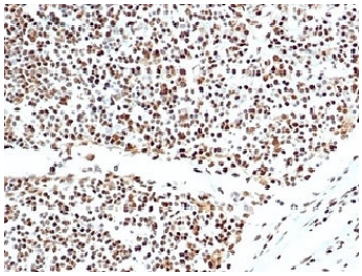
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	XRCC5/7317
Purity	Protein A/G affinity
UniProt	P13010
Localization	Nucleus
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations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



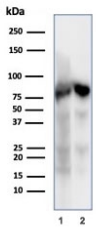
IHC staining of FFPE human colon carcinoma tissue with Ku80 antibody (clone XRCC5/7317). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



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.



IHC staining of FFPE human lymph node 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.



Western blot testing of human 1) MOLT-4 and 2) HEK293 cell lysates using Ku80 antibody (clone XRCC5/7317). Predicted molecular weight: 80-86 kDa.

Description

The Ku protein is localized in the nucleus and is composed of subunits referred to as Ku-70 (or p70) and Ku-86 or (p86) which is also known by the synonym Ku-80 or (p80). Ku was first described as an autoantigen to which antibodies were produced in a patient with scleroderma-polymyositis overlap syndrome, and was later found in the sera of patients with other rheumatic diseases. Ku has several functions, including cell signaling, DNA replication and transcriptional activation. Ku is involved in Pol II-directed transcription by virtue of its DNA binding activity; serving as the regulatory component of the DNA-associated protein kinase that phosphorylates Pol II and transcription factor Sp. Ku proteins also activate transcription from the U1 small nuclear RNA and the human transferrin receptor gene promoters.

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.

Storage

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