

# IHCeasy XRCC5 Ready-To-Use IHC Kit

Catalog Number: **KHC1528**

## General Information

Sample type:  
FFPE tissue  
Cited sample type:  
Reactivity:  
Human  
Cited Reactivity:

Assay type:  
Immunohistochemistry  
Primary antibody type:  
Rabbit Polyclonal  
Secondary antibody type:  
Polymer-HRP-Goat anti-Rabbit

## Kit Component

Component	Size	Concentration
Antigen Retrieval Buffer	100 mL	50×
Washing Buffer	100 mL ×2	20×
Blocking Buffer	5 mL	RTU
Primary Antibody	5 mL	RTU
Secondary Antibody	5 mL	RTU
Chromogen Component A	0.2 mL	RTU
Chromogen Component B	4 mL	RTU
Signal Enhancer	5 mL	RTU
Counter Staining Reagent	5 mL	RTU
Mounting Media	5 mL	RTU
Control Slide	1 slide (Optional)	FFPE
Datasheet	1 Copy	
Manual	1 Copy	

## Storage Instructions

All the reagents are stored at 2-8°C. The kit is stable for 6 months from the date of receipt.

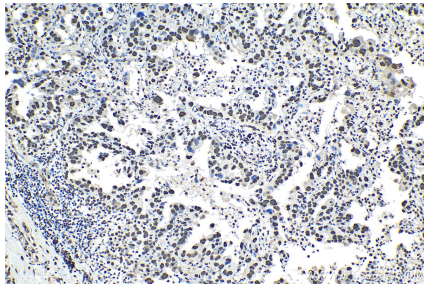
## Background

There are at least two pathways for eukaryotes to repair DNA double-strand breaks: homologous recombination and nonhomologous end joining (NHEJ). The core NHEJ machinery includes XRCC4, DNA ligase IV and the DNA-dependent protein kinase complex, which consists of the DNA end-binding XRCC5/XRCC6 heterodimer and the catalytic subunit PRKDC. The heterodimer of XRCC5/XRCC6 enhanced the affinity of the catalytic subunit PRKDC to DNA by 100-fold. Once the XRCC5/6 dimer association with NAA15, it can bind to the osteocalcin promoter and activate osteocalcin expression. The XRCC5/6 dimer acts as a negative regulator of transcription when together with APEX1. Some published papers indicated that the MW of XRCC5 is 86kDa, while more papers suggested that XRCC5 is a 80kDa protein, as it was firstly introduced in publication. Thus, Ku80 and Ku86 are the same protein.

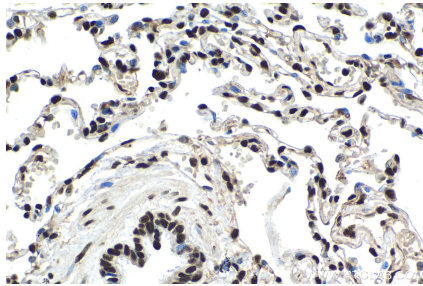
## Synonyms

86 kDa subunit of Ku antigen, CTC85, CTCBF, DNA repair protein XRCC5, G22P2, KARP 1, KARP1, Ku80, Ku86, KUB2, NFIV, Nuclear factor IV, Thyroid lupus autoantigen, TLAA, XRCC5, XRCC5/Ku80

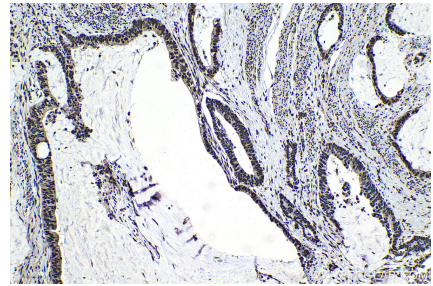
## Selected Validation Data



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using KHC1528 (XRCC5 IHC Kit).



Immunohistochemical analysis of paraffin-embedded human lung tissue slide using KHC1528 (XRCC5 IHC Kit).



Immunohistochemical analysis of paraffin-embedded human urothelial carcinoma tissue slide using KHC1528 (XRCC5 IHC Kit).