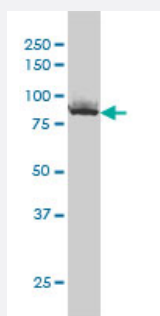


XRCC5 monoclonal antibody (M02), clone 3D8

Catalog # H00007520-M02

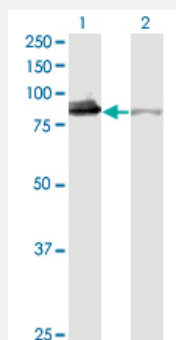
Size 100 ug

Applications



Western Blot (Cell lysate)

XRCC5 monoclonal antibody (M02), clone 3D8. Western Blot analysis of XRCC5 expression in A-431 (Cat # L015V1).

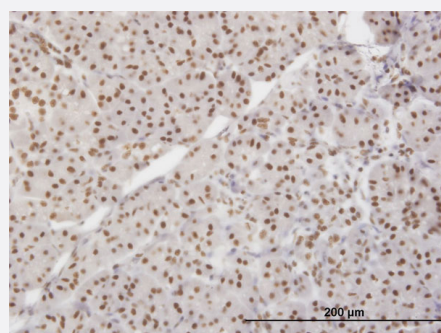


Western Blot (Transfected lysate)

Western Blot analysis of XRCC5 expression in transfected 293T cell line by XRCC5 monoclonal antibody (M02), clone 3D8.

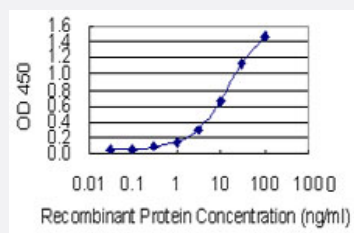
Lane 1: XRCC5 transfected lysate(82.7 KDa).

Lane 2: Non-transfected lysate.



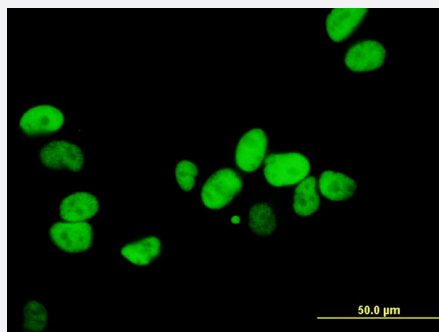
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to XRCC5 on formalin-fixed paraffin-embedded human pancreas. [antibody concentration 3 ug/ml]



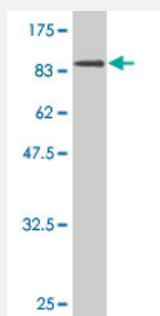
Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged XRCC5 is 0.3 ng/ml as a capture antibody.



Immunofluorescence

Immunofluorescence of monoclonal antibody to XRCC5 on HeLa cell .
[antibody concentration 10 ug/ml]



Western Blot detection against Immunogen (106.26 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a full length recombinant XRCC5.
Immunogen	XRCC5 (AAH19027.1, 1 a.a. ~ 732 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	MVRSGNKAADVLCMDVGFTMSNSIPGIESPFEQAKKVITMFVQRQVFAENKDEIALVLFGTGTD NPLSGGDQYQNITVHRHMLPDLLEDIESKIQPGSQQADSLDALVSMVQIHETIGKKFEKRHIE IFTDLSSRFSSQLDIIHSLKKCDISLQFFLPFSLGKEDGSGDRGDGPFRLLGGHGSPFPLKGITEQ QKEGLEVMKVMISLEGEDGLDEYSFSESLRKLCVFKKIERHSIHWPCRLTIGSNLSIRIAAYKSILQE RVKKTWTVVDAKTLKKEDIQKETVYCLNDDDETEVLKEDIQGFYRGSDIVPFSKVDEEQMKYKSE GKCFSVLGFCKSSQVQRRFFMGNQVLKVFAARDDEAAVALSSLIHALDDLDMVAIVRYAYDKR ANPQVGVAFPPIKHNYECLVYVQLPFMEDLRQYMFSSSLKNSKKYAPTEAQLNAVDALIDMSLAK KDEKTDLTLEDLFPPTKIPNPRFQRLFQCLLHRALHPREPLPIQQHIWNMLNPPEAEVTTKSQIPLSKI KTLFPLIEAKKKDQVTAQEIQDNHEDGPTAKKLKTEQGGAHFSVSSLAEGSVTSVGSVNPAENF RVLVKQKKASFEEASNQLINHIEQFLDTNETPYFMKSIDCIRAFREEAIKFSEEQRFNNFLKALQEK VEIKQLNHFWIIVVDGIALITKEEASGSSVTAEAAKFLAPKDKPSGDAAVFEEGGDVDDLLD MI
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (78); Rat (78)
Isotype	IgG1 Kappa

Quality Control Testing

Antibody Reactive Against Recombinant Protein.
Western Blot detection against Immunogen (106.26 KDa) .

Storage Buffer

In 1x PBS, pH 7.4

Storage Instruction

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Cell lysate)

XRCC5 monoclonal antibody (M02), clone 3D8. Western Blot analysis of XRCC5 expression in A-431 (Cat # L015V1).

[Protocol Download](#)

- Western Blot (Transfected lysate)

Western Blot analysis of XRCC5 expression in transfected 293T cell line by XRCC5 monoclonal antibody (M02), clone 3D8.

Lane 1: XRCC5 transfected lysate(82.7 KDa).

Lane 2: Non-transfected lysate.

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to XRCC5 on formalin-fixed paraffin-embedded human pancreas. [antibody concentration 3 ug/ml]

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged XRCC5 is 0.3 ng/ml as a capture antibody.

[Protocol Download](#)

- ELISA

- Immunofluorescence

Immunofluorescence of monoclonal antibody to XRCC5 on HeLa cell . [antibody concentration 10 ug/ml]

Gene Info — XRCC5

Entrez GeneID	7520
GeneBank Accession#	BC019027
Protein Accession#	AAH19027.1
Gene Name	XRCC5
Gene Alias	FLJ39089, KARP-1, KARP1, KU80, KUB2, Ku86, NFIV
Gene Description	X-ray repair complementing defective repair in Chinese hamster cells 5 (double-strand-break rejoining)
Omim ID	194364
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is the 80-kilodalton subunit of the Ku heterodimer protein which is also known as ATP-dependant DNA helicase II or DNA repair protein XRCC5. Ku is the DNA-binding component of the DNA-dependent protein kinase, and it functions together with the DNA ligase IV-XRCC4 complex in the repair of DNA double-strand break by non-homologous end joining and the completion of V(D)J recombination events. This gene functionally complements Chinese hamster xrs-6, a mutant defective in DNA double-strand break repair and in ability to undergo V(D)J recombination. A rare microsatellite polymorphism in this gene is associated with cancer in patients of varying radiosensitivity. [provided by RefSeq]
Other Designations	ATP-dependent DNA helicase II DNA repair protein XRCC5 Ku autoantigen, 80kDa Ku86 autoantigen related protein 1 X-ray repair complementing defective repair in Chinese hamster cells 5 (double-strand-break rejoining; Ku autoantigen, 80kD) X-ray repair, comp

Publication Reference

- [Expression of Ku70 predicts results of radiotherapy in prostate cancer.](#)

Hasegawa T, Someya M, Hori M, Matsumoto Y, Nakata K, Nojima M, Kitagawa M, Tsuchiya T, Masumori N, Hasegawa T, Sakata KI. Strahlentherapie und Onkologie 2017 Jan; 193(1):29.

Application: IHC-P, Human, Prostate cancer

- [Influence of XRCC4 expression in esophageal cancer cells on the response to radiotherapy.](#)

Hori M, Someya M, Matsumoto Y, Nakata K, Kitagawa M, Hasegawa T, Tsuchiya T, Fukushima Y, Gocho T, Sato Y, Ohnuma H, Kato J, Sugita S, Hasegawa T, Sakata KI.

Medical Molecular Morphology 2016 Jun; [Epub].

Application: IHC-P, Human, Esophageal cancer tissues

- [Serum anti-Ku86 is a potential biomarker for early detection of hepatitis C virus-related hepatocellular carcinoma.](#)

Nomura F, Sogawa K, Noda K, Seimiya M, Matsushita K, Miura T, Tomonaga T, Yoshitomi H, Imazeki F, Takizawa H, Mogushi K, Miyazaki M, Yokosuka O.

Biochemical and Biophysical Research Communications 2012 May; 421(4):837.

Application: Quant, Human, Serum from patients with HCV-related chronic liver diseases, HCC, other gastrointestinal cancers and in healthy volunteers

Pathway

- [Non-homologous end-joining](#)

Disease

- [Acute Disease](#)
- [Adenocarcinoma](#)
- [Ataxia telangiectasia](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Central Nervous System Neoplasms](#)
- [Colorectal Neoplasms](#)
- [DNA Damage](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Genital Neoplasms](#)
- [Genomic Instability](#)
- [Glioma](#)

- [Head and Neck Neoplasms](#)
- [Kidney Failure](#)
- [Leukemia](#)
- [Lung Neoplasms](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)
- [Mouth Neoplasms](#)
- [Multiple Myeloma](#)
- [Multiple Sclerosis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Precancerous Conditions](#)
- [Pulmonary Disease](#)
- [Radiation Injuries](#)
- [Radiodermatitis](#)
- [Stomach Neoplasms](#)
- [Thyroid Neoplasms](#)
- [Tobacco Use Disorder](#)
- [Translocation](#)
- [Urinary Bladder Neoplasms](#)
- [Werner syndrome](#)