XRCC5/XRCC6 monoclonal antibody, clone KU729 (PE)

Catalog # MAB14210 Size 500 uL

Specification

Product Description	Mouse monoclonal antibody raised against native human XRCC5 and XRCC6.
Immunogen	Nuclear extract of human HL-60 cells.
Host	Mouse
Theoretical MW (kDa)	70, 80
Reactivity	Human
Specificity	This antibody recognizes a conformational epitope of XRCC5/XRCC6 dimer, which is destroyed during Western blotting.
Form	Liquid
Conjugation	PE
Purification	Protein G purification
Isotype	IgG1, kappa
Recommend Usage	Flow Cytometry (5 uL/test/million cells in 0.1 mL or 5 uL/100 uL of whole blood) Immunofluorescence (1:50-1:100) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.05% BSA, 0.05% sodium azide).
Storage Instruction	Store at 4°C.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Immunofluorescence

- Flow Cytometry

Gene Info — XRCC6

Entrez GeneID	2547
Protein Accession#	P12956; P13010
Gene Name	XRCC6
Gene Alias	CTC75, CTCBF, G22P1, KU70, ML8, TLAA
Gene Description	X-ray repair complementing defective repair in Chinese hamster cells 6
Omim ID	152690
Gene Ontology	Hyperlink
Gene Summary	The p70/p80 autoantigen is a nuclear complex consisting of two subunits with molecular masses of approximately 70 and 80 kDa. The complex functions as a single-stranded DNA-dependent ATP-dependent helicase. The complex may be involved in the repair of nonhomologous DNA ends such as that required for double-strand break repair, transposition, and V(D)J recombination. High levels of autoantibodies to p70 and p80 have been found in some patients with systemic lupus erythematosus. [provided by RefSeq
Other Designations	ATP-dependent DNA helicase II, 70 kDa subunit|CTC box binding factor 75 kDa subunit|Ku autoantigen p70 subunit|Ku autoantigen, 70kDa|OTTHUMP00000028581|thyroid autoantigen 70kD (Ku antigen)|thyroid autoantigen 70kDa (Ku antigen)|thyroid-lupus autoantigen

Gene Info — XRCC5

Entrez GeneID	7520
Protein Accession#	P12956; P13010
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

Pathway

- Non-homologous end-joining
- Non-homologous end-joining

Disease

- Acute Disease
- Adenocarcinoma
- Adenocarcinoma
- Ataxia telangiectasia
- Brain Neoplasms
- Brain Neoplasms
- Breast cancer
- Breast cancer
- Breast Neoplasms
- Breast Neoplasms
- Carcinoma
- Carcinoma
- Cardiovascular Diseases

- Central Nervous System Neoplasms
- Central Nervous System Neoplasms
- Colorectal Neoplasms
- Diabetes Mellitus
- DNA Damage
- DNA Damage
- Edema
- Esophageal Neoplasms
- Esophageal Neoplasms
- Genetic Predisposition to Disease
- Genetic Predisposition to Disease
- Genital Neoplasms
- Genomic Instability
- Genomic Instability
- Glioma
- Glioma
- Head and Neck Neoplasms
- Head and Neck Neoplasms
- Kidney Failure
- Kidney Failure
- Leukemia
- Lung Neoplasms
- Lung Neoplasms
- Male Urogenital Diseases
- Meningeal Neoplasms
- Meningioma

- Micronuclei
- Mouth Neoplasms
- Mouth Neoplasms
- Multiple Myeloma
- Multiple Sclerosis
- Multiple Sclerosis
- Neoplasm Recurrence
- Neoplasms
- Neoplasms
- Ovarian cancer
- Ovarian cancer
- Ovarian Neoplasms
- Ovarian Neoplasms
- Precancerous Conditions
- Prostate cancer
- Prostatic Neoplasms
- Pterygium
- Pulmonary Disease
- Radiation Injuries
- Radiodermatitis
- Radiodermatitis
- Stomach Neoplasms
- Thyroid Neoplasms
- Tobacco Use Disorder
- Translocation
- Urinary Bladder Neoplasms

- Urinary Bladder Neoplasms
- Werner syndrome
- Werner syndrome