

Recombinant Human XRCC5, His-tagged

Cat. No. XRCC5-29197TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant fragment, corresponding to amino acids 345-657 of Human Ku80 with an N terminal His tag. Predicted MWt: 37 kDa;
Species	Human
Source	E.coli
ProteinLength	345-657 a.a.
Description	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.
Conjugation	HIS
Form	Lyophilised: Reconstitute with 98 µl aqua dest.
Storage buffer	Preservative: None Constituents: 0.5% Trehalose, 6M Urea, 100mM Sodium phosphate, 10mM Sodium chloride, pH 4.5

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Storage	Shipped at 4°C. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.
Sequences of amino acids	<p> FCKSSQVQRRFFMGNQVLKVFAARDDEAAVALSSLIHAL DDLDMVAIVRYAYDKR ANPQVGVAFPPIKHNYECLVYV QLPFMEDLRQYMFSSLKNSKKYAPTEAQLNAVDA LIDS MSLAKKDEKDTLEDLFPTTKIPNPRFQRLFQCLLHRALH PREPLPPIQQHIWN MLNPPAEVTTKSIPLSKIKTLFP LIEAKKKDQVTAQEIFQDNHEDGPTAKKLTKEQG GAHF SVSSLAEGSVTSVGSVNPAENFRVLVKQKKASFEEASN QLINHIEQFLDTNE TPYFMKSIDCIRAFREEAIKFSEEQR FNN </p>
Sequence Similarities	Belongs to the ku80 family.Contains 1 Ku domain.
GENE INFORMATION	
Gene Name	XRCC5 X-ray repair complementing defective repair in Chinese hamster cells 5 (double-strand-break rejoining) [Homo sapiens]
Official Symbol	XRCC5
Synonyms	XRCC5; X-ray repair complementing defective repair in Chinese hamster cells 5 (double-strand-break rejoining); X ray repair complementing defective repair in Chinese hamster cells 5 (double strand break rejoining; Ku autoantigen, 80kD); X-ray repair cross
Gene ID	7520
mRNA Refseq	NM_021141
Protein Refseq	NP_066964
MIM	194364

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Uniprot ID	P13010
Chromosome Location	2q35
Pathway	2-LTR circle formation, organism-specific biosystem; BARD1 signaling events, organism-specific biosystem; Coregulation of Androgen receptor activity, organism-specific biosystem; DNA Repair, organism-specific biosystem; DNA-PK complex, organism-specific biosystem;
Function	contributes_to 5-deoxyribose-5-phosphate lyase activity; ATP binding; ATP-dependent DNA helicase activity; DNA binding; double-stranded DNA binding;

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