

X-ray repair cross-complementing protein 5 Recombinant Protein | XRCC5 recombinant protein

Recombinant Human X-ray repair cross-complementing protein 5

CATALOG # AAA113576	HOST E Coli or Yeast or Baculovirus or Mammalian Cell
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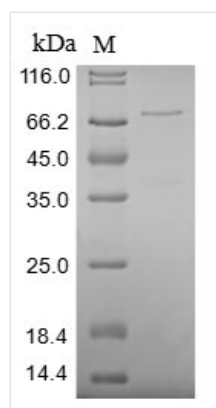
PRODUCT SYNONYMS

X-ray repair cross-complementing protein 5; Recombinant Human X-ray repair cross-complementing protein 5; 86 kDa subunit of Ku antigen; ATP-dependent DNA helicase 2 subunit 2; ATP-dependent DNA helicase II 80 kDa subunit; CTC box-binding factor 85 kDa subunit; CTC85; CTCBF; DNA repair protein XRCC5; Ku80; Ku86; Lupus Ku autoantigen protein p86; Nuclear factor IV; Thyroid-lupus autoantigen; TLAA; X-ray repair complementing defective repair in Chinese hamster cells 5 (double-strand-break rejoining); XRCC5 recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Sequence Positions	251-455aa; Partial
Sequence	LTIGSNLSIR IAAYKSILQE RVKKTWTVVD AKTLKKEDIQ KETVYCLNDD DETEVLKEDI IQGFRYGSDI VPFSKVDEEQ MKYKSEGKCF SVLGFCCKSSQ VQRRFFMGNG VLKVFAARDD EAAVALSSL IHALDDLDMV AIVRYAYDKR ANPQVGVAFP HIKHNYECLV YVQLPFMEDL RQYMFSSLKN SKKYAPTEAQ LNAVD
Sequence Length	455
Production Note	Special Offer: The Baculovirus host-expressed protein is manufactured from a stock plasmid containing the protein gene. Baculovirus host-expressed protein is stocked in different unit sizes ranging from as small as 10 ug to as large as 1 mg. Bulk inventory is also available. The Baculovirus host-expressed protein has been ordered over and over again by researchers and has stood the test of time as both a robust protein and important target for the research community. It is part of our new program to make our most popular protein targets and corresponding hosts available in expanded unit sizes and with a quick processing time. Select Baculovirus host-expressed protein for the fastest delivery among all hosts. Please contact our or email to for more details.
Preparation and Storage	Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for XRCC5 recombinant protein	Single-stranded DNA-dependent ATP-dependent helicase. Has a role in chromosome translocation. The DNA helicase II complex binds preferentially to fork-like ends of double-stranded DNA in a cell cycle-dependent manner. It works in the 3'-5' direction. Binding to DNA may be mediated by XRCC6. Involved in DNA non-homologous end joining (NHEJ) required for double-strand break repair and V(D)J recombination. The XRCC5/6 dimer acts as regulatory subunit of the DNA-dependent protein kinase complex DNA-PK by increasing the affinity of the catalytic subunit PRKDC to DNA by 100-fold. The XRCC5/6 dimer is probably involved in stabilizing broken DNA ends and bringing th together. The assembly of the DNA-PK complex to DNA ends is required for the NHEJ ligation step. In association with NAA15, the XRCC5/6 dimer binds to the osteocalcin promoter and activates osteocalcin expression. The XRCC5/6 dimer probably also acts as a 5'-deoxyribose-5-phosphate lyase (5'-dRP lyase), by catalyzing the beta-elimination of the 5' deoxyribose-5-phosphate at an abasic site near double-strand breaks. XRCC5 probably acts as the catalytic subunit of 5'-dRP activity, and allows to 'clean' the termini of abasic sites, a class of nucleotide damage commonly associated with strand breaks, before such broken ends can be joined. The XRCC5/6 dimer together with APEX1 acts as a negative regulator of transcription.
Product Categories/Family for XRCC5 recombinant protein	Epigenetics and Nuclear Signaling
References	cDNA-derived amino acid sequence of the 86-kDa subunit of the Ku antigen.Yaneva M., Wen J., Ayala A., Cook R.J. Biol. Chem. 264:13407-13411(1989) Isolation and characterization of cDNA encoding the 80-kDa subunit protein of the human autoantigen Ku (p70/p80) recognized by autoantibodies from patients with scleroderma-polymyositis overlap syndrome.Mimori T., Ohosone Y., Hama N., Suwa A., Akizuki M., Homma M., Griffith A.J., Hardin J.A.Proc. Natl. Acad. Sci. U.S.A. 87:1777-1781(1990) Complete sequencing and characterization of 21,243 full-length human cDNAs.Ota T., Suzuki Y., Nishikawa T., Otsuki T., Sugiyama T., Irie R., Wakamatsu A., Hayashi K., Sato H., Nagai K., Kimura K., Makita H., Sekine M., Obayashi M., Nishi T., Shibahara T., Tanaka T., Ishii S., Yamamoto J., Saito K., Kawai Y., Isono Y., Nakamura Y., Nagahari K., Murakami K., Yasuda T., Iwayanagi T., Wagatsuma M., Shiratori A., Sudo H., Hosoiri T., Kaku Y., Kodaira H., Kondo H., Sugawara M., Takahashi M., Kanda K., Yokoi T., Furuya T., Kikkawa E., Omura Y., Abe K., Kamihara K., Katsuta N., Sato K., Tanikawa M., Yamazaki M., Ninomiya K., Ishibashi T., Yamashita H., Murakawa K., Fujimori K., Tanai H., Kimata M., Watanabe M., Hiraoka S., Chiba Y., Ishida S., Ono Y., Takiguchi S., Watanabe S., Yosida M., Hotuta T., Kusano J., Kanehori K., Takahashi-Fujii A., Hara H., Tanase T.-O., Nomura Y., Togiya S., Komai F., Hara R., Takeuchi K., Arita M., Imose N., Musashino K., Yuuki H., Oshima A., Sasaki N., Aotsuka S., Yoshikawa Y., Matsunawa H., Ichihara T., Shiohata N., Sano S., Moriya S., Momiyama H., Satoh N., Takami S., Terashima Y., Suzuki O., Nakagawa S., Senoh A., Mizoguchi H., Goto Y., Shimizu F., Wakebe H., Hishigaki H., Watanabe T., Sugiyama A., Takemoto M., Kawakami B., Yamazaki M., Watanabe K., Kumagai A., Itakura S., Fukuzumi Y., Fujimori Y., Komiyama M., Tashiro H., Tanigami A., Fujiwara T., Ono T., Yamada K., Fujii Y., Ozaki K., Hirao M., Ohmori Y., Kawabata A., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamoto S., Okitani R., Kawakami T., Noguchi S., Itoh T., Shigeta K., Senba T., Matsumura K., Nakajima Y., Mizuno T., Morinaga M., Sasaki M., Togashi T., Oyama M., Hata H., Watanabe M., Komatsu T., Mizushima-Sugano J., Satoh T., Shirai Y., Takahashi Y., Nakagawa K., Okumura K., Nagase T., Nomura N., Kikuchi H., Masuho Y., Yamashita R., Nakai K., Yada T., Nakamura Y., Ohara O., Isogai T., Sugano S.Nat. Genet. 36:40-45(2004) Suzuki Y., Sugano S., Totoki Y., Toyoda A., Takeda T., Sakaki Y., Tanaka A., Yokoyama S. NIEHS SNPs program

NCBI AND UNIPROT INFORMATION

NCBI GI #	10863945
NCBI GeneID	7520
NCBI Accession #	NP_066964.1
NCBI GenBank Nucleotide #	NM_021141.3
UniProt Accession #	P13010; Q0Z7V0; Q4VBQ5; Q53HH7; Q7M4N0; Q9UCQ0; Q9UCQ1; A8K3X5
Molecular Weight	27.4 kDa
NCBI Official Full Name	X-ray repair cross-complementing protein 5
NCBI Official Synonym Full Names	X-ray repair complementing defective repair in Chinese hamster cells 5
NCBI Official Symbol	XRCC5
NCBI Official Synonym Symbols	KU80; KUB2; Ku86; NFIV; KARP1; KARP-1

NCBI Protein Information	X-ray repair cross-complementing protein 5
UniProt Protein Name	X-ray repair cross-complementing protein 5
UniProt Gene Name	XRCC5
UniProt Synonym Gene Names	G22P2; CTC85; CTCBF; TLAA
UniProt Entry Name	XRCC5_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/xrcc5-recombinant-protein-e-coli/113576>