

Ku70 & Ku80 Heterodimer Recombinant Protein | XRCC5&XRCC6 recombinant protein

Ku70 & Ku80 Heterodimer Protein, Human, Recombinant (His Tag)

CATALOG #
AAA258267

HOST
Baculovirus-Insect Cells

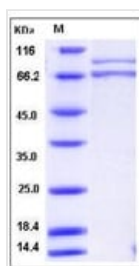
PRODUCT SYNONYMS

Ku70 & Ku80 Heterodimer; Ku70 & Ku80 Heterodimer Protein; Human; Recombinant (His Tag); Human XRCC5 & XRCC6 Heterodimer Protein; KARP-1 Protein; KARP1 Protein; KU80 Protein; Ku86 Protein; KUB2 Protein; NFIV Protein; XRCC5 & XRCC6; XRCC5&XRCC6 recombinant protein

PRODUCT SPECIFICATIONS

Host	Baculovirus-Insect Cells
Purity/Purification	? 90 % as determined by SDS-PAGE
Form/Format	Lyophilized from sterile 20 mM Tris, 500 mM NaCl, 10% Glycerol, pH 8, 5% Trehalose, 5% Mannitol, 0.01% Tween-80.
Source	Human
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	His & His
Protein Construction	A DNA sequence encoding the XRCC5 (P13010)(Met 1-Ile 732) was fused with a polyhistidine tag at the N-terminus, constructed the plasmid 1; A DNA sequence encoding the XRCC6 (P12956)(Met 1-Asp 609) was fused with a polyhistidine tag at the N-terminus, constructed the plasmid 2. The two plasmids were co-expressed and the heterodimer was purified.
Reconstitution	It is recommended that sterile water (200ul) be added to the vial to prepare a stock solution of 0.25mg/mL. Concentration is measured by UV.
Reconstitution	Reconstituted with sterile deionized water to 0.15 mg/mL.
Molecular Mass	The recombinant heterodimer of human XRCC5/XRCC5 comprises 1379 (751 + 628) amino acids and has a calculated molecular mass of 157 (85 + 72) kDa. The apparent molecular mass of rh XRCC5/XRCC5 heterodimer is approximately 70 & 85 kDa respectively in SDS-PAGE under reducing conditions.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20°C to -80°C. Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for XRCC5&XRCC6 recombinant protein	Background: X-ray repair cross-complementing protein 5, also known as 86kDa subunit of Ku antigen, ATP-dependent DNA helicase 2 subunit 2, ATP-dependent DNA helicase II 8kDa subunit, CTC box-binding factor 85kDa subunit, DNA repair protein XRCC5, Lupus Ku autoantigen protein p86, TLAA and XRCC5, is a nucleus and chromosome which belongs to the ku8 family. XRCC5 is a single-stranded DNA-dependent ATP-dependent helicase. XRCC5 has a role in chromosome translocation. X-ray repair cross-complementing protein 6, also known as 5'-deoxyribose-5-phosphate lyase Ku7, ATP-dependent DNA helicase 2 subunit 1, ATP-dependent DNA helicase II 7kDa subunit, 7kDa subunit of Ku antigen, ATP-dependent DNA helicase 2 subunit 1, CTC box-binding factor 75kDa subunit, Lupus Ku autoantigen protein p7, Thyroid-lupus autoantigen and XRCC6, is a nucleus and chromosome which belongs to the ku7 family. Heterodimer of a XRCC6 and a XRCC5 subunit associates in a DNA-dependent manner with PRKDC to form the DNA-dependent protein kinase complex DNA-PK, and with the LIG4-XRCC4 complex. The dimer also associates with NAA15, and this complex binds to the osteocalcin promoter and activates osteocalcin expression.
References	Featherstone C. et al., 1999, Mutat Res. 434: 3-15. Zhang Z. et al., 2001, J Biol Chem. 276: 38231-6. Hsu H-L. et al., 2002, DNA Repair 1: 225-35. Roberts SA. et al., 2010, Nature. 464:1214-7. Burkard TR. et al., 2011, BMC Syst Biol. 5: 17.

NCBI AND UNIPROT INFORMATION

NCBI GI #	10863945
NCBI GeneID	7520
NCBI Accession #	NP_066964.1
NCBI GenBank Nucleotide #	NM_021141.3
UniProt Accession #	P13010; P12956
Molecular Weight	Predicted Molecular Mass: 158.73 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 (double-strand-break rejoining)
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; TLAA; CTC85; CTCBF; nuclear factor IV; Ku autoantigen, 80kDa; DNA repair protein XRCC5; thyroid-lupus autoantigen; 86 kDa subunit of Ku antigen; lupus Ku autoantigen protein p86; Ku86 autoantigen related protein
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://stage.aaabiotech.com/xrcc5-recombinant-protein-baculovirus-insect-cells/258267>