

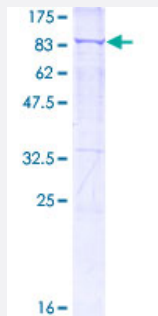
Full-Length

XRCC6 (Human) Recombinant Protein (P01)

Catalog # H00002547-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human XRCC6 full-length ORF (AAH08343.1, 1 a.a. - 609 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MSGWESYYKTEGDDEEAEQEEENLEASGDYKYSGRDSLIFLVDASKAMFESQSEDELTPFDMSI
 QCIQSVYISKIISDRDLLAVVFYGTEDKNSVNFKNYVLQELDNPGAKRILELDQFKGQQGQKRF
 QDMMGHGSDYSLSEVLWVCANLFSQVQFKMSHKRIMLFTNEDNPHGNSAKASRARTKAGDLR
 DTGIFLDLMHLKKPGGFDISLFYRDIISIAEDEDLRVHFEESKLEDLLRKVRKETRKRALSRLKLK
 LNKDIVISVGYNLVQKALKPPPIKLYRETNEPVKTKTRTFNTSTGGLLLPSTDKRSQYGSQRQILEKE
 ETEELKRFDGPGLMLMGFKPLVLLKKHHYLRPSLFVYPEESLVIGSSTLFSALLIKCLEKEVAALCR
 YTPRRNIPPYFVALVPQEEELDDQKIQVTPPGFQLVFLPFADDKRKMPFTEKIMATPEQVGKMKAI
 VEKLRFYRSDSFENPVLQQHFRNLEALALDLMEPEQAVDLTPKVEAMNKRGLSLVDEFKELV
 YPPDYNPEGKVTKRKHDNEGSGSKRPKVEYSEEELKTHISKGTLGKFTVPMLKEACRAYGLKSGL
 KKQELLEALTKHFQD

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

92.73

Interspecies Antigen Sequence

Mouse (83); Rat (83)

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — XRCC6

Entrez GeneID	2547
GeneBank Accession#	BC008343
Protein Accession#	AAH08343.1
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

Publication Reference

- [HMGB1 signaling phosphorylates Ku70 and impairs DNA damage repair in Alzheimer's disease pathology.](#)

Hikari Tanaka, Kanoh Kondo, Kyota Fujita, Hidenori Homma, Kazuhiko Tagawa, Xiaocen Jin, Meihua Jin, Yuki Yoshioka, Sumire Takayama, Hitomi Masuda, Rie Tokuyama, Yukoh Nakazaki, Takashi Saito, Takaomi Saido, Shigeo Murayama, Teikichi Ikura, Nobutoshi Ito, Yu Yamamori, Kentaro Tomii, Marco E Bianchi, Hitoshi Okazawa.

Communications Biology 2021 Oct; 4(1):1175.

Application: KA, Human, Human Kinase Protein

Pathway

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

Disease

- [Adenocarcinoma](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Central Nervous System Neoplasms](#)
- [Diabetes Mellitus](#)
- [DNA Damage](#)
- [Edema](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)

- [Genomic Instability](#)
- [Glioma](#)
- [Head and Neck Neoplasms](#)
- [Kidney Failure](#)
- [Lung Neoplasms](#)
- [Male Urogenital Diseases](#)
- [Micronuclei](#)
- [Mouth Neoplasms](#)
- [Multiple Sclerosis](#)
- [Neoplasms](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Pterygium](#)
- [Radiodermatitis](#)
- [Urinary Bladder Neoplasms](#)
- [Werner syndrome](#)