Datasheet for ABIN7553806

ERCC3 Protein (AA 1-782) (His tag)

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Overview

Quantity:	1 mg
Target:	ERCC3
Protein Characteristics:	AA 1-782
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ERCC3 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat ERCC3 Protein expressed in mammalien cells.
Sequence:	MGKRDRADRD KKKSRKRHYE DEEDDEEDAP GNDPQEAVPS AAGKQVDESG TKVDEYGAKD YRLQMPLKDD HTSRPLWVAP DGHIFLEAFS PVYKYAQDFL VAIAEPVCRP THVHEYKLTA YSLYAAVSVG LQTSDITEYL RKLSKTGVPD GIMQFIKLCT VSYGKVKLVL KHNRYFVESC HPDVIQHLLQ DPVIRECRLR NSEGEATELI TETFTSKSAI SKTAESSGGP STSRVTDPQG KSDIPMDLFD FYEQMDKDEE EEEETQTVSF EVKQEMIEEL QKRCIHLEYP LLAEYDFRND SVNPDINIDL KPTAVLRPYQ EKSLRKMFGN GRARSGVIVL PCGAGKSLVG VTAACTVRKR CLVLGNSAVS VEQWKAQFKM WSTIDDSQIC RFTSDAKDKP IGCSVAISTY SMLGHTTKRS WEAERVMEWL KTQEWGLMIL DEVHTIPAKM FRRVLTIVQA HCKLGLTATL VREDDKIVDL NFLIGPKLYE ANWMELQNNG YIAKVQCAEV WCPMSPEFYR EYVAIKTKKR ILLYTMNPNK FRACQFLIKF HERRNDKIIV FADNVFALKE YAIRLNKPYI YGPTSQGERM QILQNFKHNP KINTIFISKV GDTSFDLPEA NVLIQISSHG GSRRQEAQRL GRVLRAKKGM VAEEYNAFFY

Product Details

	SLVSQDTQEM AYSTKRQRFL VDQGYSFKVI TKLAGMEEED LAFSTKEEQQ QLLQKVLAAT DLDAEEEVVA GEFGSRSSQA SRRFGTMSSM SGADDTVYME YHSSRSKAPS KHVHPLFKRF RK **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris Page, Western Blot
Grade:	custom-made

Target Details

Target:	ERCC3
Alternative Name:	ERCC3 (ERCC3 Products)
Background:	General transcription and DNA repair factor IIH helicase subunit XPB (TFIIH subunit XPB) (EC 3.6.4.12) (Basic transcription factor 2 89 kDa subunit) (BTF2 p89) (DNA excision repair protein ERCC-3) (DNA repair protein complementing XP-B cells) (TFIIH basal transcription factor complex 89 kDa subunit) (TFIIH 89 kDa subunit) (TFIIH p89) (Xeroderma pigmentosum group B-complementing protein),FUNCTION: ATP-dependent 3'-5' DNA helicase, component of the general transcription and DNA repair factor IIH (TFIIH) core complex, which is involved in general and transcription-coupled nucleotide excision repair (NER) of damaged DNA and, when complexed to CAK, in RNA transcription by RNA polymerase II. In NER, TFIIH acts by opening

Target Details

	DNA around the lesion to allow the excision of the damaged oligonucleotide and its replacement by a new DNA fragment. The ATPase activity of XPB/ERCC3, but not its helicase activity, is required for DNA opening. In transcription, TFIIH has an essential role in transcription initiation (PubMed:8157004, PubMed:30894545). When the pre-initiation complex (PIC) has been established, TFIIH is required for promoter opening and promoter escape (PubMed:8157004). The ATP-dependent helicase activity of XPB/ERCC3 is required for promoter opening and promoter escape. Phosphorylation of the C-terminal tail (CTD) of the largest subunit of RNA polymerase II by the kinase module CAK controls the initiation of transcription. {ECO:0000269|PubMed:10024882, ECO:0000269|PubMed:30894545, ECO:0000269|PubMed:8157004}.
Molecular Weight:	89.3 kDa
UniProt:	P19447
Pathways:	DNA Damage Repair

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months

