

Datasheet for ABIN7553822
ERCC2 Protein (AA 1-760) (His tag)



[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	ERCC2
Protein Characteristics:	AA 1-760
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ERCC2 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat ERCC2 Protein expressed in mammalian cells.
Sequence:	MKLNVDGLLV YFPYDIYPE QFSYMRELKR TLDKAGHGVL EMPSGTGKT V SLLALIMAYQ RAYPLEVTKL IYCSRTVPEI EKVIEELRKL LNFYEKQEGE KLPFLGLALS SRKNLCIHPE VTPLRFGKDV DGKCHSLTAS YVRAQYQHDT SLPHCRFYEE FDAHGREVPL PAGIYNLDDL KALGRRQGWC PYFLARYSIL HANVVVYSYH YLLDPKIADL VSKELARKAV VVFDEAHNID NVCIDSMSVN LTRRTLDRQC GNLETLQKTV LRIKETDEQR LRDEYRRLVE GLREASAARE TDAHLANPVL PDEVLQEAVP GSIRTAEHFL GFLRRLLEYV KWRLRVQHVV QESPPAFLSG LAQRVCIQRK PLRFAERLR SLLHTLEITD LADFSPLTLL ANFATLVSTY AKGFTIIIIEP FDDRTPTIAN PILHFSCMDA SLAIKPVFER FQSVIITSGT LSPLDIYPKI LDFHPVTMAT FTMTLARVCL CPMIIGRND QVAISSKFET REDIAVIRNY GNLLLEMSAV VPDGIVAFFT SYQYMESTVA SWYEQGILEN IQRNKLLFIE TQDGAETSVA LEKYQEACEN GRGAILLSVA RGKVSEGIDF VHHYGRAVIM FGVPYVYTQS RILKARLEYL RDQFQIREND FLTFDAMRHA

Product Details

AQCVGRAIRG KTDYGLMVFA DKRFARGDKR GKLPRWIQEH LTDANLNLTV DEGVQVAKYF
LRQMAQPFHR EDQLGLSLLS LEQLESEETL KRIEQIAQQL **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 mammalian 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:

ERCC2

Alternative Name:

ERCC2 ([ERCC2 Products](#))

Background:

General transcription and DNA repair factor IIH helicase subunit XPD (TFIIH subunit XPD) (EC 3.6.4.12) (Basic transcription factor 2 80 kDa subunit) (BTF2 p80) (CXPB) (DNA excision repair protein ERCC-2) (DNA repair protein complementing XP-D cells) (TFIIH basal transcription factor complex 80 kDa subunit) (TFIIH 80 kDa subunit) (TFIIH p80) (Xeroderma pigmentosum group D-complementing protein),FUNCTION: ATP-dependent 5'-3' 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 ATP-dependent helicase activity of XPD/ERCC2 is required for DNA opening. In transcription, TFIIH has an essential role in transcription initiation. When the pre-initiation complex (PIC) has been established, TFIIH 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. XPD/ERCC2 acts by forming a bridge between CAK and the core-TFIIH complex. Involved in the regulation of vitamin-D receptor activity. As part of the mitotic spindle-associated MMXD complex it plays a role in chromosome segregation. Might have a role in aging process and could play a causative role in the generation of skin cancers. {ECO:0000269|PubMed:10024882, ECO:0000269|PubMed:15494306, ECO:0000269|PubMed:20797633, ECO:0000269|PubMed:8413672}.

Molecular Weight: 86.9 kDa

UniProt: [P18074](#)

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