

# Datasheet for ABIN7553867 **EXD2 Protein (AA 1-621) (His tag)**



#### Overview

Quantity:	1 mg
Target:	EXD2
Protein Characteristics:	AA 1-621
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This EXD2 protein is labelled with His tag.

### **Product Details**

Purpose:	Custom-made recombinant EXD2 Protein expressed in mammalian cells.
Sequence:	MSRQNLVALT VTTLLGVAVG GFVLWKGIQR RRRSKTSPVT QQPQQKVLGS RELPPPEDDQ
	LHSSAPRSSW KERILKAKVV TVSQEAEWDQ IEPLLRSELE DFPVLGIDCE WVNLEGKASP
	LSLLQMASPS GLCVLVRLPK LICGGKTLPR TLLDILADGT ILKVGVGCSE DASKLLQDYG
	LVVRGCLDLR YLAMRQRNNL LCNGLSLKSL AETVLNFPLD KSLLLRCSNW DAETLTEDQV
	IYAARDAQIS VALFLHLLGY PFSRNSPGEK NDDHSSWRKV LEKCQGVVDI PFRSKGMSRL
	GEEVNGEATE SQQKPRNKKS KMDGMVPGNH QGRDPRKHKR KPLGVGYSAR KSPLYDNCFL
	HAPDGQPLCT CDRRKAQWYL DKGIGELVSE EPFVVKLRFE PAGRPESPGD YYLMVKENLC
	VVCGKRDSYI RKNVIPHEYR KHFPIEMKDH NSHDVLLLCT SCHAISNYYD NHLKQQLAKE
	FQAPIGSEEG LRLLEDPERR QVRSGARALL NAESLPTQRK EELLQALREF YNTDVVTEEM
	LQEAASLETR ISNENYVPHG LKVVQCHSQG GLRSLMQLES RWRQHFLDSM QPKHLPQQWS
	VDHNHQKLLR KFGEDLPIQL S 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.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different
	isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:
	<ul> <li>Made to order protein - from design to production - by highly experienced protein experts.</li> <li>Protein expressed in mammalian cells and purified in one-step affinity chromatography</li> <li>The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.</li> <li>State-of-the-art algorithm used for plasmid design (Gene synthesis).</li> </ul>
	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, anti-tag ELISA, Western Blot and analytical SEC (HPLC
Grade:	custom-made
Target Details	
Target:	EXD2
Alternative Name:	EXD2 (EXD2 Products)
Background:	Exonuclease 3'-5' domain-containing protein 2 (EC 3.1.11.1) (3'-5' exoribonuclease EXD2) (EC 3.1.13) (Exonuclease 3'-5' domain-like-containing protein 2),FUNCTION: Exonuclease that ha both 3'-5' exoribonuclease and exodeoxyribonuclease activities, depending on the divalent metal cation used as cofactor (PubMed:29335528, PubMed:31127291). In presence of Mg(2+only shows 3'-5' exoribonuclease activity, while it shows both exoribonuclease and exodeoxyribonuclease activities in presence of Mn(2+) (PubMed:29335528, PubMed:31127291). Acts as an exoribonuclease in mitochondrion, possibly by regulating ATF

double-strand breaks resection and efficient homologous recombination (PubMed:20603073,

PubMed:26807646). Plays a key role in controlling the initial steps of chromosomal break repair, it is recruited to chromatin in a damage-dependent manner and functionally interacts with the MRN complex to accelerate resection through its 3'-5' exonuclease activity, which efficiently processes double-stranded DNA substrates containing nicks (PubMed:26807646). Also involved in response to replicative stress: recruited to stalled forks and is required to stabilize and restart stalled replication forks by restraining excessive fork regression, thereby suppressing their degradation (PubMed:31255466). {ECO:0000269|PubMed:20603073, ECO:0000269|PubMed:26807646, ECO:0000269|PubMed:31255466}.

Molecular Weight:

70.4 kDa

UniProt:

Q9NVH0

## **Application Details**

Application Notes:

We expect the protein to work for functional studies. 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