

Datasheet for ABIN7553847

## Exonuclease 1 Protein (EX01) (AA 1-846) (His tag)



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### Overview

Quantity:	1 mg
Target:	Exonuclease 1 (EX01)
Protein Characteristics:	AA 1-846
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Exonuclease 1 protein is labelled with His tag.

### Product Details

Purpose:	Custom-made recombinant EX01 Protein expressed in mammalian cells.
Sequence:	<p>             MGIQGLLQFI KEASEPIHVR KYKGQVVAVD TYCWLHKGAI ACAEKLAKGE PTDRYVGFCM              KFVNMLLSHG IKPILVFDGC TLPSKKEVER SRRERRQANL LKGKQLLREG KVSEARECFT              RSINITHAMA HKVIKAARSQ GVDCLVAPYE ADAQLAYLNK AGIVQAIITE DSDLLAFGCK              KVILKMDQFG NGLEIDQARL GMCRLGDVF TEEKFRYMCI LSGCDYLSSL RGIGLAKACK              VLRLANNPDI VKVIKKIGHY LKMNITVPED YINGFIRANN TFLYQLVFDP IKRKLIPLNA              YEDDVDPETL SYAGQYVDDS IALQIALGNK DINTFEQIDD YNPDTAMPAH SRSHSWDDKT              CQKSANVSSI WHRNYSRPE SGTVSDAPQL KENPSTVGVE RVISTKGLNL PRKSSIVKRP              RSAELSEDDL LSQYLSFTK KTKKNSSEGN KSLSFSEVFV PDLVNGPTNK KSVSTPPRTR              NKFATFLQRK NEESGAVVVP GTRSRFFCSS DSTDCVSNKV SIQPLDETAV TDKENNLHES              EYGDQEGKRL VDTDVARNSS DDIPNNHIPG DHIPDKATVF TDEESYSFES SKFTRTISPP              TLGTLRSCFS WSGGLGDFSR TPSPSPSTAL QQFRRKSDSP TSLPENNMMSD VSQLKSEESS              DDESHPLREE ACSSQSQESG EFSLQSSNAS KLSQCSSKDS DSEESDCNIK LLDSQSDQTS           </p>

## Product Details

KLRLSHFSKK DTPLRNKVPK LYKSSSADSL STTKIKPLGP ARASGLSKKP ASIQKRKHHN  
AENKPGQLQIK LNELWKNFGF KKDSEKLPPC KKPLSPVRDN IQLTPEAEED IFNKPECGRV QRAIFQ

**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:

- 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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade: custom-made

## Target Details

Target: Exonuclease 1 (EXO1)

Alternative Name: EXO1 ([EXO1 Products](#))

Background: Exonuclease 1 (hExo1) (EC 3.1.-.-) (Exonuclease I) (hExoI), FUNCTION: 5'→3' double-stranded DNA exonuclease which may also possess a cryptic 3'→5' double-stranded DNA exonuclease activity. Functions in DNA mismatch repair (MMR) to excise mismatch-containing DNA tracts directed by strand breaks located either 5' or 3' to the mismatch. Also exhibits endonuclease activity against 5'-overhanging flap structures similar to those generated by displacement synthesis when DNA polymerase encounters the 5'-end of a downstream Okazaki fragment.

## Target Details

Required for somatic hypermutation (SHM) and class switch recombination (CSR) of immunoglobulin genes. Essential for male and female meiosis.  
{ECO:0000269|PubMed:10364235, ECO:0000269|PubMed:10608837, ECO:0000269|PubMed:11809771, ECO:0000269|PubMed:11842105, ECO:0000269|PubMed:12414623, ECO:0000269|PubMed:12704184, ECO:0000269|PubMed:14636568, ECO:0000269|PubMed:14676842, ECO:0000269|PubMed:15225546, ECO:0000269|PubMed:15886194, ECO:0000269|PubMed:16143102, ECO:0000269|PubMed:9685493}.

Molecular Weight:	94.1 kDa
UniProt:	<a href="#">Q9UQ84</a>
Pathways:	<a href="#">DNA Damage Repair</a> , <a href="#">Production of Molecular Mediator of Immune Response</a>

## 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