

Product datasheet for **RG200127**

EXD2 (NM_018199) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	EXD2
Synonyms:	C14orf114; EXDL2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG200127 representing NM_018199
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCCTCCCCAAGTGGCCTGTGTGCTTGGTTCGCCTGCCAAGCTAATCTGTGGAGGAAAACTAC
 CAAGAACGTTATTGGATATTTTGGCAGATGGCACCATTGAAAGTTGGAGTGGGATGCTCAGAAGATGC
 CAGCAAGCTTCTGCAGGATTATGGCCTCGTTGTTAGGGGGTGCCTGGACCTCCGATACCTAGCCATGCGG
 CAGAGAAACAATTTGCTCTGTAATGGGCTTAGCCTGAAGTCCCTCGCTGAGACTGTTTTGAACCTTCCCC
 TTGACAAGTCCCTTCTACTTCGTTGCAGCAACTGGGATGCTGAGACTCTCACAGAGGACCAGGTAATTTA
 TGCTGCCAGGGATGCCAGATTTCACTGGCTCTTTTCTTCATCTTCTGGATACCCCTTCTCTAGGAAT
 TCACCTGGAGAAAAACGATGACCACAGTAGCTGGAGAAAAGTCTTGGAAAAATGCCAGGGTGTGGTCG
 ACATCCCATTTTGAAGCAAGGAATGAGCAGATTGGGAGAAGAGGTTAATGGGAAGCAACAGAATCTCA
 GCAGAAGCCAAGAAATAAGAAGTCTAAGATGGATGGGATGGTCCAGGCAACCACCAAGGGAGAGACCCC
 AGAAAAATATAAGAAAGCCTCTGGGGGTGGGCTATTCTGCCAGAAAAATCACCTCTTTATGATAACTGCT
 TTCTCCATGCTCCTGATGGACAGCCCTCTGCACTTGTGATAGAAGAAAAGCTCAGTGGTACCTGGACAA
 AGGCATTGGTGAGCTGGTGAGTGAAGAGCCCTTGTGGTGAAGTACGGTTTGAACCTGCAGGAAGGCC
 GAATCTCCTGGAGACTATTACTTGTGTTAAAGAGAACCTGTGTGTAGTGTGTGGCAAGAGAGACTCCT
 ACATTCCGAAGAAGCGTGATTCACATGAGTACCGGAAGCACTTCCCATCGAGATGAAGGACCACAACCT
 CCACGATGTGCTGCTGCTGCACTCCTGCCATGCCATTTCCAACACTATGACAACCATCTGAAGCAG
 CAGCTGGCCAAGGAGTTCCAGGCCCATCGGCTCTGAGGAGGGCTTGCCTGCTGGAAGATCTGAGC
 GCCGGCAGGTGCGTTCTGGGGCCAGGGCCCTGCTCAACGCGAGAGCCTGCCTACTCAGCGAAAGGAGGA
 GCTGCTGCAAGCACTCAGAGAGTTTATAACACAGACGTGGTCACAGAGGAGATGCTTCAAGAGGCTGCC
 AGCCTGGAGACCAGAATCTCCAATGAAACTATGTTCTCACGGGCTGAAGGTGGTGCAGTGTACAGCC
 AGGGTGGCTGCGCTCCCTCATGCAGCTGGAGAGCCGTGGCGTCAGCACTTCTGGACTCCATGCAGCC
 CAAGCACCTGCCCCAGCAGTGGTCACTGGACCACAACCATCAGAAGCTGCTCCGGAATTCGGGGAAGAT
 CTTCCATCCAGCTGTCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAA

Protein Sequence: >RG200127 representing NM_018199
 Red=Cloning site Green=Tags(s)

MASPSGLCVLVRPLKICGGKTLPRLLDILADGTILKVGVCSEDASKLLQDYGLVVRGCLDLRYLAMR
 QRNNLLCNGLSLKSLAETVLNPLDKSLLLRCSNWDATLTEDQVIYAARDAQISVALFLHLLGYPSRN
 SPGEKNDDHSSWRKVLEKCGGVVDIPFRSKGMSRLGEEVNGEATESQQKPRNKKSKMDGMVPGNHQGRDP
 RKHKRKLPLGVGYSARKSPLYDNCFLHAPDQPLCTCDRRAQWYLDKGIGELVSEEPFVVKLRFEPAGRP
 ESPGDYYLMVKENLCVVCGRDSYIRKNVIPHEYRKHFPIEMKDHNSHDVLLCTSCHAIISNYDNHLKQ
 QLAKEFQAPIGSEGLRLLEDPERRQVRS GARALLNAESLPTQRKEELLQALREFYNTDVTVEEMLQEAA
 SLETRISNENYVPHGLKVQCHSQGGLRSLMQLESRWQHF LDSMPKHLPPQWSVDHNHQLLRKFGED
 LPIQLS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_018199

ORF Size: 1488 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_018199.3](#)

RefSeq Size: 2833 bp

RefSeq ORF: 1491 bp

Locus ID: 55218

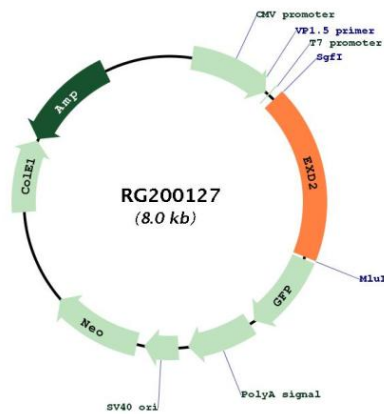
UniProt ID: [Q9NVH0](#)

Cytogenetics: 14q24.1

Domains: 3_5_exonuclease

Gene Summary: Exonuclease required for double-strand breaks resection and efficient homologous recombination. 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.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG200127