

Product datasheet for **RC206223**

EXDL1 (EXD1) (NM_152596) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EXDL1 (EXD1) (NM_152596) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EXDL1
Synonyms:	EXDL1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC206223 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGGACAGTGAATTCCTAGCTTATGTGGAAGTACTAGATGAAGTGGAAACAAGGCTCAGTGAGAGCAA
 AAGCATCTTCTGTAGTCTACATGCAGAAAGAAGCTGGATGGAGAAAATGAAAGTTGAAGACCTAAATGT
 ATGTGAGCCTGCTTCTCCTGCCCTGAAGCACCAGCTACCTCTCTGCTGAATGACCTCAAGTACAGCCCA
 TCAGAGGAAGAGGAGGTGACATACACAGTCATTAATCAATTCCAGCAGAAGTTTGGTGCTGCGATACTCC
 ATATCAAGAAGCAGAATGCTCCTGAGTGTGGCAGCAGAAGGAGCGAATGTATGTCGCCATGGCAAAGTGTG
 CTGGCTGCAGGTGGCCACAAATTGCCGAGTTTACTTATTTGACATTTTCTTCTGGGAAGTCGAGCTTTC
 CACAATGGACTTCAGATGATACTAGAAGACAAGAGAATTTGAAGTTATCCATGATTGTCGTTGGCTTT
 CTGATTGCCTCTCTCATCAGTATGGAATTTTGTGAATAATGTCTTTGACACACAGGTAGCAGATGACT
 TCAGTTTTCCATGGAAACGGGTGGCTATCTTCCAAACTGCATCACTACTTGCAGGAGAGTTTAATCAA
 CACCTTCAAGTAGCCCTAAATATCTCTCTTTCTAGAAAAGAGACAAAACTAATTCAGAAAAATCCAG
 AAGTATGGTTCATCCGACCTGTTTACCCTCTTACTGAAAATTTTGGCCCTGGAAGCTACCTACCTGTT
 ACCCTTTCGCTTGGCACTCCTAGATGAGATGATGTCTGACCTAACCACCTGGTGGATGGTTACCTAAAC
 ACGTATCGCGAAGGGTCTGCAGACCGGCTTGGAGGCACTGAGCCTACATGTATGGAGCTGCCAGAGGAAC
 TGCTTCAACTCAAGGACTTCAGAAGCAGCGCAGGGAGAAAGCTGCAAGAGAATATAGGGTGAATGCACA
 GGGACTCCTGATAAGGACAGTGTACAGCCAAAGAAATAGTGACAGAGACAGCAGGAAAGAGGAGAAA
 GTCAAAGGCTTCTTATTTGGTAAAAATTTAGGATAGATAAAGCTCCAAGTTTACATCTCAAGACTTTTC
 ACGGGGATGTGAATTTACTGAAAGAAGAATCTTTGAATAAACAAGCTACAATCCTCAAGACTACCTCC
 CACGGAGGAAGGGAAACTAGTGAGGATTCCAGTAACAAACTCATTTGCACAAAGTCAAAGGGTCCAGAG
 GACCAGAGAATAACTCAGAAAGAACACTTTATGACACCCAAACATGAGTTTCAGGCAAGTTTATCTTTGA
 AAGAGGAGACAGAACAGTTATTGATGGTGGAAAACAAGGAAGTTTAAAAATGCACAAAACAGGCTGTTTC
 AATGTCTTCTTTCTCAGGAAACCAGAGTGTCTCCAAGTACACTTTTTATCTATCAGAAAGACTGTG
 GTTCCACACTCCCTCCCTGTCCAGCCTTGAGAAAGATCGATTCTGGATAAGTCCTTTTCTAAATCTGC
 CC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC206223 protein sequence
 Red=Cloning site Green=Tags(s)

MEDSEFLAYVELLDEVEQGSVRKASSVSLHAERTWMEKMKVEDLNVCEPASPAPAPATSLNLNDLKYS
 SEEEVYTYVINQFQQKFGAAIHLHIKKQNVLSVAEAGANVCRHGKLCWLQVATNCRVYLFDFLLGSRAF
 HNGLQMILEDKRILKVIHDCRWLSDCLSHQYGILLNNVFDQVADVLFQSMETGGYLPNCITTLQESLIK
 HLQVAPKYLSFLEKRQKLIQENPEVWFIRPVSPSLLKILALEATYLLPLRLALLDEMMSDLTTLVDGYLN
 TYREGSADRLGGTEPTCMEPEELLQLKDFQKQRREKAAREYRVNAQGLLIRTVLQPKLVETAGKEEK
 VKGFLFGKNFRIDKAPSFTSQDFHGDVNLKKEESLNKQATNPQHLPPTEEGETSEDSSNKLICTKSKGSE
 DQRITQKEHFMPKHEFQASLSLKEETEQLLMVENKEDLCKTKQAVSMSSFPQETRVSPSDTFYPIRKT
 VSTLPPCPALEKIDSWISPFNLNP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6073_c01.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_152596

ORF Size: 1542 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.

RefSeq: [NM_152596.2](#), [NP_689809.2](#)

RefSeq Size: 3009 bp

RefSeq ORF: 1545 bp

Locus ID: 161829

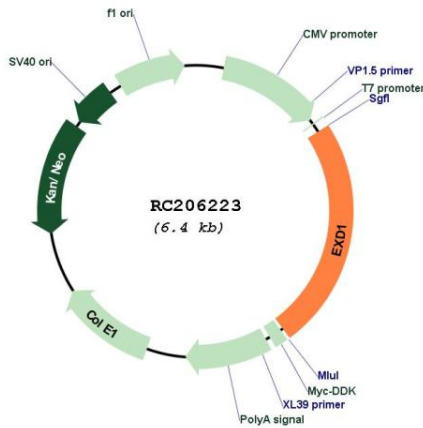
UniProt ID: [Q8NHP7](#)

Cytogenetics: 15q15.1

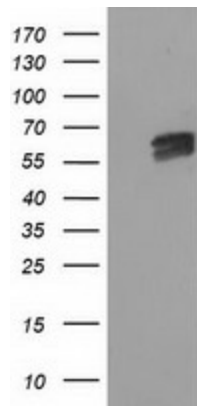
MW: 58.3 kDa

Gene Summary: RNA-binding component of the PET complex, a multiprotein complex required for the processing of piRNAs during spermatogenesis. The piRNA metabolic process mediates the repression of transposable elements during meiosis by forming complexes composed of piRNAs and Piwi proteins and governs the methylation and subsequent repression of transposable elements, preventing their mobilization, which is essential for the germline integrity (By similarity). The PET complex is required during the secondary piRNAs metabolic process for the PIWIL2 slicing-triggered loading of PIWIL4 piRNAs. In the PET complex, EXD1 probably acts as an RNA adapter. EXD1 is an inactive exonuclease (By similarity). [UniProtKB/Swiss-Prot Function]

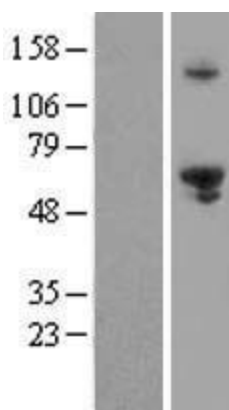
Product images:



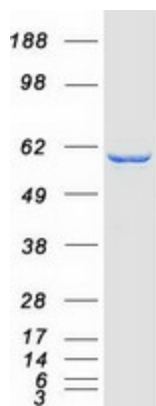
Circular map for RC206223



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY EXD1 (Cat# RC206223, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-EXD1 (Cat# [TA502151]). Positive lysates [LY407402] (100ug) and [LC407402] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY407402]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206223 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified EXD1 protein (Cat# [TP306223]). The protein was produced from HEK293T cells transfected with EXD1 cDNA clone (Cat# RC206223) using MegaTran 2.0 (Cat# [TT210002]).