

## Product datasheet for **RC209064**

### **EXTL1 (NM\_004455) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	EXTL1 (NM_004455) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EXTL1
Synonyms:	EXTL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RC209064 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGCAGTCGTGGAGGAGAAGAAAGTCCCTGTGGCTGGCACTGTACGCTCCTGGCTCCTGCTTGTCTGCTGC  
TGGGAGGCTTCTCCCTTCTCCGCTGGCATTGCCCTCCAGACCTCGGCCCGGGCTTCCAAGGCTGGCC  
CCGCTGGCTGGATGCAGAGCTCCTGCAGAGCTTCTCCAGCCTGGAGAGCTCCAGAAAGATGCCGTTTCA  
CCTCCTCAAGCCCTCATGGTGGCAGCTGCAACTGGGAATCTTGCTTTGATACCTCAAAGTGCAGGGGCG  
ATGGCCTTAAGGTATTCGTGTACCCAGCGGTTGGAACCATCTCTGAGACTCATCGCAGGATCCTGGCTTC  
CATTGAGGGCTCTCGTTCTACACATTCAGCCCTGCTGGGGCTGCCTCCTCCTCCTCAGCCTGGAC  
GCCCAGACTGGAGAGTGCAGCTCAATGCCTCTGCAATGGAACAGGGGCAGGAACCATCTGGTCTCCGTC  
TCCACCCGGCTCCCTGCCAGGACCTCCAGCTGGGACAGGCTATGGTGGCTGAGGCCAGCCCCACGGT  
GGACTCCTTCCGGCCCGCTTTGATGTGGCCCTCCCTTTCTCCCTGAAGCCACCCGTTGCGAGGTGGG  
GCTCCTGGCCAGCTGCGCAACACAGCCCCAGCCCGGGTAGCCCTGTAGCCCTGGAAGAGGAGAGGG  
GTGGGTGGCGCACAGCAGACACTGGCTCCTCTGCCTGCCCTGGGATGGGCGCTGTGAGCAAGACCTGG  
ACCTGGGAGACCCAGCGCCAGGAGACGCTGCCAATGCCACCTTCTGCCTCATCTCTGGCCACCGTCCC  
GAGGCTGCCTCGCGCTTCTCCAAGCCCTGCAGGCCGGCTGCATCCCAGTGTCTCAGCCCCCGCTGGG  
AGCTGCCCTTCTCCGAGGTATCGACTGGACCAAGGCAGCCATCGTAGCTGATGAGAGGCTCCCAGTTCA  
GGTCTGGCTGCCCTCCAGGAGATGTCCCTGCACGGTCTCGCCCTGCGTCAGCAGACCCAGTTTCTA  
TGGGATGCCTACTTCTCCTCAGTGGAGAAGGTATCCATACCACTCTGGAGGTTATTGAGACCCGATTT  
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TTCCACAAGCCCCAGGACTTCCCTTCTACTACCTGCAACAGGGCTCCCGCCCTGAGGGCAGATTCAGC  
GCCCTGATCTGGGTGGGGCCCCAGGCCAGCCCTCTGAAGCTCATCCAGGCGGTGGCAGGCTCCCAGC  
ACTGTGCCAGATCTTGGTTCTCTGGAGCAATGAGAGGCCACTCCCATCCAGGTGGCCGGAGACAGCTGT  
GCCCTTGACAGTCATTGATGGGCACAGGAAGTTAGTGATCGTTCTACCCATATAGCACCATCAGAACA  
GATGCCATCCTCAGCCTCGATGCCCGCAGCAGTCTTCCACAAGTGGGTGGACTTTGCCTTTCTGGTGT  
GGCAGAGCTTCCAGAGCGGATGGTGGGCTTCTGACGTCGAGCCATTTCTGGGACGAGGCCCATGGTGG  
CTGGGGCTACACTGCTGAGAGGACCAACGAATTCTCATGGTTCTCACCACAGCCGCTTCTACCATAGG  
TATTACCACACTCTTCCACCCACTCCCTGCCAAGGCTCTGAGGACCCTGGCAGATGAGGCACCCACCT  
GTGTGGACGTCCTGATGAATTTATAGTAGCAGCAGTACCAAGCTGCCCTATCAAGGTGCCCTATGG  
CAAGCAGCGCCAGGAGGCTGCTCCACTGGCGCCTGGGGGGCCGGGGCCAGGCCAAAGCCGCTGCCCA  
GCCCCGACTGCATCAACCAGATAGCGGCAGCGTTCCGGCCACATGCCCTTGTGTCTCTCGTCTGCGTC  
TGGACCCGGTGTGTTAAGGACCCGGTGTCCGTGCAGCGCAAGAAGTACCGCAGCCTGGAGAAGCCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC209064 protein sequence  
Red=Cloning site Green=Tags(s)

```

MQSWRRRKSLWLAL SASWLLL VLLGGFSLRLALPPRRPGASQGWPRWLDAELLQSFSQPGELPEDAVS
PPQAPHGGSCNWESCFTSKCRGDGLKVFVYPVGTISETHRRILASIEGSRFYTFSPAGACLLLLSLD
AQTGECSSMPLQWNRGRNHLVRLHPAPCRPTFQLGQAMVAEASPTVDSFRPGFDVALPFLPEAHPLRGG
APGQLRQHSPQPGVALLALEEERGGWRTADTGSSACPWDGRCEQDPGPGQTQRQETLPNATFCLISGHRP
EAASRFLQALQAGCIPVLLSPRWELPFSEVIDWTKAAIVADERLPLQVLAALQEMSPARVLALRQQTQFL
WDAYFSSVEKVIHTTLEVIQDRIFGTSAHPSLLWNSPPGALLALSTFSTSPQDFPFYYLQQGSRPEGRFS
ALIWWGPPGQPPLKLIQAVAGSQHCAQILVLSNERPLSRWPETAVPLTVIDGHRKVSDFYPYSTIRT
DAILSLDARSSLSTSEVDF AFLVWQSFPERMVGFLTSSHFWEAHGGWGYYAERTNEFSMVLTTAAFYHR
YYHTLFTHS LPKALRTL ADEAPTCVDVLMNFIVAAVTKLPPIKVPYKQRQEAAPLAPGGPGRP KPPAP
APDCINQIAAAF GHMPLLSSRLRLDPVLFKDPVSVQRKKYRSLEKP
  
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6358\\_e04.zip](https://cdn.origene.com/chromatograms/mk6358_e04.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_004455

**ORF Size:** 2028 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\\_004455.3](#)

**RefSeq Size:** 4021 bp

**RefSeq ORF:** 2031 bp

**Locus ID:** 2134

**UniProt ID:** [Q92935](#)

**Cytogenetics:** 1p36.11

**Domains:** Exostosin

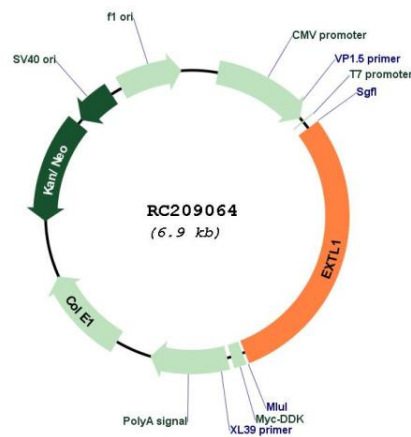
**Protein Families:** Transmembrane

**Protein Pathways:** Heparan sulfate biosynthesis, Metabolic pathways

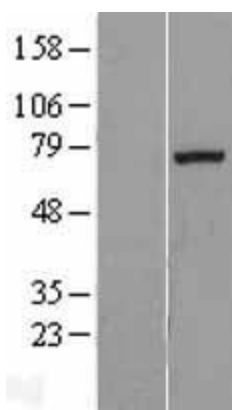
**MW:** 74.7 kDa

**Gene Summary:** This gene is a member of the multiple exostoses (EXT) family of glycosyltransferases, which function in the chain polymerization of heparan sulfate and heparin. The encoded protein harbors alpha 1,4- N-acetylglucosaminyltransferase activity, and is involved in chain elongation of heparan sulfate and possibly heparin. [provided by RefSeq, Jul 2008]

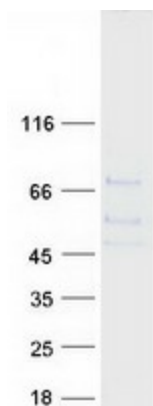
## Product images:



Circular map for RC209064



Western blot validation of overexpression lysate (Cat# [LY417975]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209064 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified EXTL1 protein (Cat# [TP309064]). The protein was produced from HEK293T cells transfected with EXTL1 cDNA clone (Cat# RC209064) using MegaTran 2.0 (Cat# [TT210002]).