

## Product datasheet for **RG209064**

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

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	EXTL1 (NM_004455) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	EXTL1
Synonyms:	EXTL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RG209064 representing NM\_004455  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGCAGTCGTGGAGGAGAAGAAAGTCCCTGTGGCTGGCACTGTACGCTCCTGGCTCCTGCTTGTCTCTGC  
TGGGAGGCTTCTCCCTTCTCCGCTGGCATTGCCCTCCAGACCTCGGCCCGGGCTTCCAAGGCTGGCC  
CCGCTGGCTGGATGCAGAGCTCCTGCAGAGCTTCTCCAGCCTGGAGAGCTCCAGAAAGATGCCGTTTCA  
CCTCCTCAAGCCCTCATGGTGGCAGCTGCAACTGGGAATCTTGCTTTGATACCTCAAAGTGCAGGGGCG  
ATGGCCTTAAGGTATTCGTGTACCCAGCGGTTGGAACCATCTCTGAGACTCATCGCAGGATCCTGGCTTC  
CATTGAGGGCTCTCGTTCTACACATTCAGCCCTGCTGGGGCTGCCTCCTCCTCCTCAGCCTGGAC  
GCCCAGACTGGAGAGTGCAGCTCAATGCCTCTGCAATGGAACAGGGGCAGGAACCATCTGGTCTCCGTC  
TCCACCCGGCTCCCTGCCAGGACCTCCAGCTGGGACAGGCTATGGTGGCTGAGGCCAGCCCCACGGT  
GGACTCCTTCCGGCCCGCTTTGATGTGGCCCTCCCTTTCTCCCTGAAGCCACCCGTTGCGAGGTGGG  
GCTCCTGGCCAGCTGCGGCAACACAGCCCCAGCCCGGGTAGCCCTGCTAGCCCTGGAAGAGGAGAGGG  
GTGGGTGGCGCACAGCAGACTGGCTCCTCTGCCTGCCCTGGGATGGGCGCTGTGAGCAAGACCTGG  
ACCTGGGACAGCCAGGCCAGGAGACGCTGCCAATGCCACCTTCTGCCTCATCTCTGGCCACCGTCCC  
GAGGCTGCCTCGCGCTTCTCCAAGCCCTGCAGGCCGGCTGCATCCCAGTGTCTCAGCCCCCGCTGGG  
AGCTGCCCTTCTCCGAGGTATCGACTGGACCAAGGCAGCCATCGTAGCTGATGAGAGGCTCCCAGTTCA  
GGTCTGGCTGCCCTCCAGGAGATGTCCCTGCACGGTCTCGCCCTGCGTCAGCAGACCCAGTTTCTA  
TGGGATGCCTACTTCTCCTCAGTGGAGAAGTCCATCCATACCCTCTGGAGGTTATTGAGACCCGATTT  
TTGGAACATCAGCTCACCCCTCACTGCTGTGGAACAGCCCCAGGGGCACTCCTGGCCCTGTCTACTTT  
TTCCACAAGCCCCAGGACTTCCCTTCTACTACCTGCAACAGGGCTCCCGCCCTGAGGGCAGATTCAGC  
GCCCTGATCTGGGTGGGGCCCCAGGCCAGCCCTCTGAAGCTCATCCAGGCGGTGGCAGGCTCCCAGC  
ACTGTGCCAGATCTTGGTTCTCTGGAGCAATGAGAGGCCACTCCATCCAGGTGGCCGGAGACAGCTGT  
GCCCTTGACAGTCATTGATGGGCACAGGAAGTTAGTGATCGTTCTACCCATATAGCACCATCAGAACA  
GATGCCATCCTCAGCCTCGATGCCCGCAGCAGTCTTCCACAAGTGGGTGGACTTTGCCTTTCTGGTGT  
GGCAGAGCTTCCAGAGCGGATGGTGGGCTTCTGACGTCGAGCCATTTCTGGGACGAGGCCATGGTGG  
CTGGGGCTACACTGCTGAGAGGACCAACGAATTCTCCATGGTTCTCACCACAGCCGCTTCTACCATAGG  
TATTACCACACTCTTCCACCCACTCCCTGCCAAGGCTCTGAGGACCCTGGCAGATGAGGCACCCACCT  
GTGTGGACGTCCTGATGAATTTATAGTAGCAGCAGTCACCAAGCTGCCCTATCAAGGTGCCCTATGG  
CAAGCAGCGCCAGGAGGCTGCTCCACTGGCGCCTGGGGGCCCCGGGGCCAGGCCAAAGCCGCTGCCCA  
GCCCCGACTGCATCAACCAGATAGCGGCAGCGTTCCGGCCACATGCCCTTGTGTCTCTCGTCTGCGTC  
TGGACCCGGTGTGTTAAGGACCCGGTGTCCGTGCAGCGCAAGAAGTACCGCAGCCTGGAGAAGCCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG209064 representing NM\_004455  
 Red=Cloning site Green=Tags(s)

```

MQSWRRRKSLLWALSASWLLLVLGGFSLRLALPPRPRPGASQGWPRWDAELLQSFSQPGELPEDAVS
PPQAPHGGSCNWESCFTD SKCRGDGLKVFVYPVAVGTISETHRRILASIEGSRFYTFSPAGACLLLLSLD
AQTGECSSMPLQWNRGRNHLVLRHPAPCPRTFQLGQAMVAEASPTVDSFRPGFDVALPFLPEAHPLRGG
APGQLRQHSPQPGVALLALEEERGGWRTADTGSSACPDWGRCEQDPGPGQTQRQETLPNATFCLISGHRP
EAASRFLQALQAGCIPVLLSPRWELPFSEVIDWTKAAIVADERLPLQVLAALQEMSPARVLALRQQTQFL
WDAYFSSVEKVIHTTLEVIQDRIFGTSAHPSLLWNSPPGALLALSTFSTSPQDFPFYYLQQGSRPEGRFS
ALIWVGPPQPPLKLIQAVAGSQHCAQILVLSNERPLPSRPETAVPLTVIDGHRKVSDFYPYSTIRT
DAILSLDARSSLSTSEVDF AFLVWQSFPERMVGFLTSSHFWEAHGGWGYTAERTNEFSMLVTTAAFYHR
YYHTLFTHSLPKALRTL ADEAPTCDVLMNFIVA AVTKLPP IKVPYKQKQEAAPLAPGGPGPRPKPPAP
APDCINQIAAAF GHMPLLSSRLRLDPVLFKDPVSVQRKKYRSLEKP
  
```

TRTRPLE - GFP Tag - V

**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

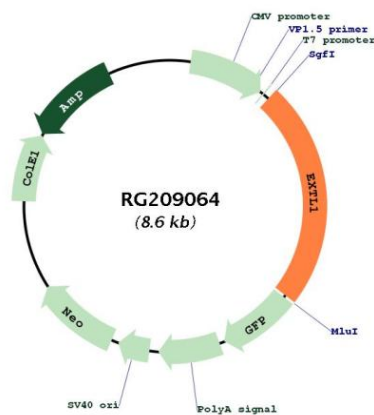
**Domains:** Exostosin

**Protein Families:** Transmembrane

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

**Gene Summary:** This gene is a member of the multiple exostosins (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 RG209064