

## Product datasheet for **RG221426**

### **EXT2 (NM\_000401) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	EXT2 (NM_000401) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	EXT2
Synonyms:	SOTV; SSMS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RG221426 representing NM\_000401  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGTGTGCGTCGCTCAAGTATAATATCCGGGGTCTGCCCTCATCCCAAGAATGAAGACCAAGCACCAGAA  
TCTACTATATCACCCCTTCTCCATTGTCTCCTGGGCCTCATTGCCACTGGCATGTTTCAGTTTTGGCC  
CCATTCTATCGAGTCTCAAATGACTGGAATGTAGAGAAGCGCAGCATCCGTGATGTGCCGTTGTTAGG  
CTGCCAGCCGACAGTCCCATCCCAGAGCGGGGGATCTCAGTTGCAGAATGCACACGTGTTTTGATGTCT  
ATCGCTGTGGCTCAACCCAAAGAACAATAAAGGTGTATCTATGCTCTGAAAAAGTACGTGGATGA  
CTTTGGCGTCTCTGTGAGCAACACCATCTCCGGGAGTATAATGAACTGCTCATGGCCATCTCAGACAGT  
GACTACTACACTGATGACATCAACGGGCTGTCTGTTTGTCCCTCCATCGATGTGCTTAACCAGAACA  
CACTGCGCATCAAGGAGACAGCACAAGCGATGGCCAGCTCTCTAGGTGGATCGAGGTACGAATCACCT  
GTTGTTCAACATGTTGCCTGGAGGTCCCCAGATTATAACACAGCCCTGGATGTCCCAGAGACAGGGCC  
CTGTTGGCTGGTGGCGGCTTTTCTACGTGGACTTACCGCAAGGCTACGATGTACAGATTCTGTCTATA  
GTCCACTGTGAGGTGAGTGTCTCCAGAGAAAGGACCAGGTCCACGGCAATACTTCCCTCTGTCTATC  
TCAGGTGGGTCTCCATCTGAGTACAGAGAGGACCTAGAAGCCCTCCAGGTCAAACATGGAGAGTCAAGT  
TTAGTACTCGATAAATGCACCAACCTCTCAGAGGGTGTCTTTCTGTCCGTAAGCGCTGCCACAAGCACC  
AGGTCTTCGATTACCCACAGGTGCTACAGGAGGCTACTTTCTGTGTGGTCTTCGTTGGAGCTCGGCTGGG  
CCAGGCAGTATTGAGCGATGTGTTACAAGCTGGCTGTGTCCGGTTGTATTGCAGACTCCTATATTTTG  
CCTTTCTCTGAAGTCTTGACTGGAAGAGAGCATCTGTGGTTGTACCAGAAGAAAAGATGTCAGATGTGT  
ACAGTATTTTGCAGAGCATCCCCAAAGACAGATTGAAGAAATGCAGAGACAGGCCGGTGGTCTGGGA  
AGCGTACTTCCAGTCAATTAAGCCATTGCCCTGGCCACCCTGCAGATTATCAATGACCGGATCTATCCA  
TATGCTGCCATCTCCTATGAAGAATGGAATGACCTCCTGCTGTGAAGTGGGGCAGCGTGAGCAATCCAC  
TCTTCTCCCGCTGATCCCACCACAGTCTCAAGGGTTCACCGCCATAGTCTCACCTACGACCGAGTAGA  
GAGCCTTTCGGGTCACTACTGAAGTGTCCAAGGTGCCAGTCTATCCAACTACTTGTGCTGGAAT  
AATCAGAATAAAAACCTCCAGAAGATTCTCTGGCCAAAATCCGGTTCATTAAGTGTGAGGA  
CTGCTGAAAACAAGTTAAGTAACCGTTTCTTCCCTTATGATGAAATCGAGACAGAAGCTGTTCTGGCCAT  
TGATGATGATATCATTATGCTGACCTCTGACGAGCTGCAATTTGGTTATGAGGTCTGGCGGAATTTCT  
GACCGTTGGTGGTTACCCGGTCTGCTGATCTCTGGGACCATGAGATGAATAAGTGAAGTATGAGT  
CTGAGTGGACGAATGAAGTGTCCATGGTCTCACTGGGGCAGCTTTTATCACAAGTATTTAATTACCT  
GTATACCTACAAAATGCCTGGGGATATCAAGAAGTGGGTAGATGCTCATATGAACTGTGAAGATATTGCC  
ATGAACTTCTGGTGGCCAACGTACGGGAAAAGCAGTTATCAAGGTAACCCACGAAAGAAATCAAGT  
GTCCTGAGTGCACAGCCATAGATGGGCTTCTACTAGACCAAACACACATGGTGGAGAGGTGAGATGCAT  
CAACAAGTTTGTTCAGTCTTCGGGACCATGCCTCTCAAGGTGGTGAACACCGAGCTGACCCTGTCTCTG  
TACAAAGATGACTTCTGAGAAGCTGAAGAGCTTCCCAACATTGGCAGCTTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG221426 representing NM\_000401  
 Red=Cloning site Green=Tags(s)

MCASVKYNIRGPALIPRMKTKHRIYYITLFSIVLLGLIATGMFQFWPHSIESSNDWNVEKRSIRDVPVVR  
 LPADSPIPERGDLSRMTCTFDVYRCGFNPKNKIKVYIYALKKYVDDFGVSVSNTISREYNELLMASDS  
 DYYTDDINRACLFVPSIDVNLQNTLRIKETAQAMAQLSRWDRGTNHLFNMLPGGPPDYNTALDVPDRRA  
 LLAGGGFSTWYRQGYDVSIPVYSPLSAEVDLPEKGGPRQYFLLSSQVGLHPEYREDLEALQVKHGESV  
 LVLDKCTNLSEGLSVRKRCHKHQVFDYPQVLQEATFCVVLRGARLGQAVLSDVLQAGCVPVVIADSYIL  
 PFSEVLDWKRAVVVPEEKMSDVYSILQSIPQRQIEEMQRQARWFWEAYFQSIKAIALATLQIINDRIYP  
 YAAISYEEWNDPPAVKWSVSNPLFLPLIPPQSQGFTAI VLT YDRVESLFRVITEVSKVPSLSKLLVWVN  
 NQKNPPEDSLWPKIRVPLKVVRTAENKLSNRFFPYDEIETEAVLAIDDDIIMLTSEDLQFGYEVWREFP  
 DRLVGYPGRLHLWDHEMNKWKYSEWTVNEVSMVLTGAAYHKYFNLYTYKMPGDIKNWVDAMNCEDIA  
 MNFLVANVTGKAVIKVTPRKKFKCPECTAIDGLSLDQTHMVERSEKINKFASVFGTMPLKVVVEHRADPVL  
 YKDDFPEKLSKSPNIGSL

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_000401

**ORF Size:** 2154 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\\_000401.1](#)

**RefSeq Size:** 3804 bp

**RefSeq ORF:** 2256 bp

**Locus ID:** 2132

**UniProt ID:** [Q93063](#)

**Cytogenetics:** 11p11.2

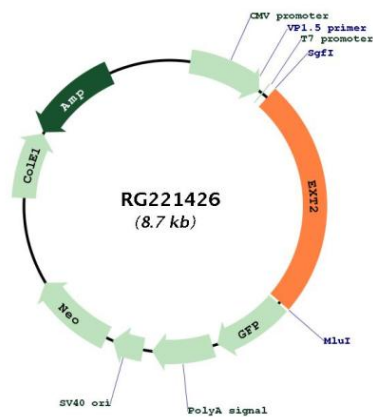
**Domains:** Exostosin

**Protein Families:** Druggable Genome, Transmembrane

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

**Gene Summary:** This gene encodes one of two glycosyltransferases involved in the chain elongation step of heparan sulfate biosynthesis. Mutations in this gene cause the type II form of multiple exostoses. Alternatively spliced transcript variants encoding different isoforms have been noted for this gene. [provided by RefSeq, Jul 2008]

## Product images:



Circular map for RG221426