

Product datasheet for **RG230461**

EXT2 (NM_001178083) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EXT2 (NM_001178083) 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:

>RG230461 representing NM_001178083
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTGTGCGTCGGTCAAGTATAATATCCGGGGTCTGCCCTCATCCCAAGAATGAAGACCAAGCACCGAA
 TCTACTATATCACCCCTTCTCCATTGTCTCCTGGGCCTCATTGCCACTGGCATGTTTCAGTTTTGGCC
 CCATTCTATCGAGTCCTCAAATGACTGGAATGTAGAGAAGCGCAGCATCCGTGATGTGCCGTTGTTAGG
 CTGCCAGCCGACAGTCCCATCCCAGAGCGGGGGATCTCAGTTGCAGAATGCACACGTGTTTTGATGTCT
 ATCGCTGTGGCTCAACCCAAAGAACAATAAAGGTGTATCTATGCTCTGAAAAAGTACGTGGATGA
 CTTTGGCGTCTCTGTGAGCAACACCATCTCCGGGAGTATAATGAACTGCTCATGGCCATCTCAGACAGT
 GACTACTACACTGATGACATCAACGGGCTGTCTGTTTGTCCCTCCATCGATGTGCTTAACCAGAACA
 CACTGCGCATCAAGGAGACAGCACAAGCGATGGCCAGCTCTCTAGGTGGATCGAGGTACGAATCACCT
 GTTGTTCAACATGTTGCCTGGAGGTCCCCAGATTATAACACAGCCCTGGATGTCCCAGAGACAGGGCC
 CTGTTGGCTGGTGGCGGCTTTTCTACGTGGACTTACCGCAAGGCTACGATGTCCAGCATTCTGTCTATA
 GTCCACTGTCAGCTGAGGTGGATCTCCAGAGAAAGGACCAGGTCCACGGCAATACTTCCCTCTGTCTATC
 TCAGGTGGGTCTCCATCCTGAGTACAGAGAGGACCTAGAAGCCCTCCAGGTCAAACATGGAGAGTCAAGT
 TTAGTACTCGATAAATGCACCAACCTCTCAGAGGGTGTCTTTCTGTCCGTAAGCGCTGCCACAAGCACC
 AGGTCTTCGATTACCCACAGGTGCTACAGGAGGCTACTTTCTGTGTGGTCTTCGTTGGAGCTCGGCTGGG
 CCAGGCAGTATTGAGCGATGTGTTACAAGCTGGCTGTGTCCCGTTGTATTGCAGACTCCTATATTTTG
 CCTTTCTCTGAAGTCTTGACTGGAAGAGAGCATCTGTGGTGTACCAGAAGAAAAGATGTCAGATGTGT
 ACAGTATTTTGCAGAGCATCCCCAAAGACAGATTGAAGAAATGCAGAGACAGCTTTTATGGAACAGC
 CAGGAGAGAGAAGTGGTCACTGCTAATCACCAAATGAACTCCCTGATCTGGCCTAGGGAACAGTGGGAT
 TCACAGATTATCAATGACCGGATCTATCCATATGCTGCCATCTCCTATGAAGAATGGAATGACCCTCTG
 CTGTGAAGTGGGCGAGCTGAGCAATCCACTCTTCCCTCCCGTGTATCCCACCACAGTCTCAAGGGTTCAC
 CGCCATAGTCCTCACCTACGACCGAGTAGAGAGCCTTCCGGGTCACTACTGAAGTGTCCAAGGTGCC
 AGTCTATCCAACTACTTGTCTGGAATAATCAGAATAAAAACCCCTCCAGAAGATTCTCTTGCCCCA
 AAATCCGGTTCATTAAAAGTTGTGAGGACTGCTGAAAACAAGTTAAGTAACCGTTTCTCCCTTATGA
 TGAATCGAGACAGAAGCTGTTCTGGCCATTGATGATGATATCATTATGCTGACCTTGACGAGCTGCAA
 TTTGGTTATGAGGTCTGGCGGAAATTTCTGACCGGTTGGTGGTTACCCGGGTCGTCTGCATCTCTGGG
 ACCATGAGATGAATAAGTGAAGTATGAGTCTGAGTGGACGAATGAAGTGTCCATGGTGTCACTGGGGC
 AGCTTTTTATCACAAGTATTTAATTACCTGTATACCTACAAAATGCCTGGGGATATCAAGAAGTGGGTA
 GATGCTCATATGAACTGTGAAGATTTGCCATGAACTTCTGGTGGCCAACGTCACGGGAAAAGCAGTTA
 TCAAGGTAACCCACGAAAGAAATCAAGTGTCTGAGTGCACAGCCATAGATGGGCTTTCACTAGACCA
 AACACACATGGTGGAGAGGTGAGTGCATCAACAAGTTTGTCTCAGTCTTCGGGACCATGCCTCTCAAG
 GTGGTGGAAACCCGAGCTGACCTGTCTGTACAAAGTACTTCTGAGAAGCTGAAGAGCTTCCCCA
 ACATTGGCAGCTTA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG230461 representing NM_001178083
 Red=Cloning site Green=Tags(s)

MCASVKYNIRGPALIPRMKTKHRIYYITLFSIVLLGLIATGMFQFWPHSIESSNDWNVEKRSIRDVPVVR
 LPADSPIPERGDLSRMTHTCFDVRGCFNPKNKIKVYIYALKKYVDDFGVSVSNTISREYNELLMASDS
 DYYTDDINRACLFVPSIDVLNQNTLRKETATAQAMAQLSRWDRGTNHLNFNMLPGGPPDYNTALDVPDRDA
 LLAGGGFSTWYRQGYDVSIPVYSPLSAEVDLPEKGGPRQYFLLSSQVGLHPEYREDLEALQVKHGESV
 LVLDKCTNLSEGLSVRKRCHKHQVFDYPQVLQEATFCVVLRGARLGQAVLSDVLQAGCVPVVIADSYIL
 PFSEVLDWKRAVVVPEEKMSDVYSILQSIPQRQIEEMQRQLFMEPARRENWSAANHQMNSLIWPREQWD
 SQIINDRIYPYAAISYEEWNPAPVWGSVSNPLFLPLIPPQSQGFTAIVLTYDRVESLFRVITEVSKVP
 SLSKLLVWNNQKNPPEDSLWPKIRVPLKVVRTAENKLSNRFFPYDEIETEAVLAIDDDIIMLTSEDELQ
 FGYEVWREFPDRLVGYPGRLLHWDHEMNKWKYSEWTNEVSMVL TGAIFYHKYFNLYTYKMPGDIKNWV
 DAHMNCEDIAMNFLVANVTGKAVIKVTPRKFKCPECTAIDGLSLDQTHMVERSEKINFASVFGTMPLK
 VVEHRADPVLYKDDFPEKLSKSPNIGSL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001178083

ORF Size: 2184 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_001178083.2](#)

RefSeq Size: 3678 bp

RefSeq ORF: 2187 bp

Locus ID: 2132

UniProt ID: [Q93063](#)

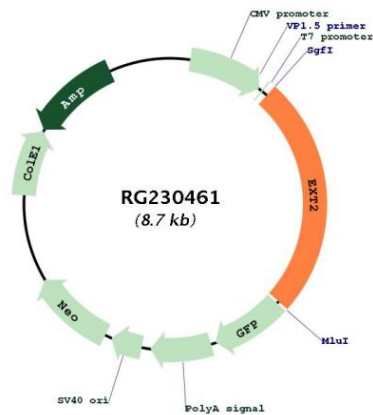
Cytogenetics: 11p11.2

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 RG230461