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# Product datasheet for RC230461

## EXT2 (NM_001178083) Human Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | EXT2 (NM_001178083) Human Tagged ORF Clone |
| **Tag:** | Myc-DDK |
| **Symbol:** | EXT2 |
| **Synonyms:** | SOTV; SSMS |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-Entry (PS100001) |
| **E. coli Selection:** | Kanamycin (25 ug/mL) |

**ORF Nucleotide Sequence:**

>RC230461 representing NM_001178083
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTGTGCGTCGGTCAAGTATAATATCCGGGGTCCTGCCCTCATCCCAAGAATGAAGACCAAGCACCGAA
TCTACTATATCACCCTCTTCTCCATTGTCCTCCTGGGCCTCATTGCCACTGGCATGTTTCAGTTTTGGCC
CCATTCTATCGAGTCCTCAAATGACTGGAATGTAGAGAAGCGCAGCATCCGTGATGTGCCGGTTGTTAGG
CTGCCAGCCGACAGTCCCATCCCAGAGCGGGGGGATCTCAGTTGCAGAATGCACACGTGTTTTGATGTCT
ATCGCTGTGGCTTCAACCCAAAGAACAAAATCAAGGTGTATATCTATGCTCTGAAAAAGTACGTGGATGA
CTTTGGCGTCTCTGTCAGCAACACCATCTCCCGGGAGTATAATGAACTGCTCATGGCCATCTCAGACAGT
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CACTGCGCATCAAGGAGACAGCACAAGCGATGGCCCAGCTCTCTAGGTGGGATCGAGGTACGAATCACCT
GTTGTTCAACATGTTGCCTGGAGGTCCCCCAGATTATAACACAGCCCTGGATGTCCCCAGAGACAGGGCC
CTGTTGGCTGGTGGCGGCTTTTCTACGTGGACTTACCGGCAAGGCTACGATGTCAGCATTCCTGTCTATA
GTCCACTGTCAGCTGAGGTGGATCTTCCAGAGAAAGGACCAGGTCCACGGCAATACTTCCTCCTGTCATC
TCAGGTGGGTCTCCATCCTGAGTACAGAGAGGACCTAGAAGCCCTCCAGGTCAAACATGGAGAGTCAGTG
TTAGTACTCGATAAATGCACCAACCTCTCAGAGGGTGTCCTTTCTGTCCGTAAGCGCTGCCACAAGCACC
AGGTCTTCGATTACCCACAGGTGCTACAGGAGGCTACTTTCTGTGTGGTTCTTCGTGGAGCTCGGCTGGG
CCAGGCAGTATTGAGCGATGTGTTACAAGCTGGCTGTGTCCCGGTTGTCATTGCAGACTCCTATATTTTG
CCTTTCTCTGAAGTTCTTGACTGGAAGAGAGCATCTGTGGTTGTACCAGAAGAAAAGATGTCAGATGTGT
ACAGTATTTTGCAGAGCATCCCCCAAAGACAGATTGAAGAAATGCAGAGACAGCTCTTCATGGAACCAGC
CAGGAGAGAGAACTGGTCAGCTGCTAATCACCAAATGAACTCCCTGATCTGGCCTAGGGAACAGTGGGAT
TCACAGATTATCAATGACCGGATCTATCCATATGCTGCCATCTCCTATGAAGAATGGAATGACCCTCCTG
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CGCCATAGTCCTCACCTACGACCGAGTAGAGAGCCTCTTCCGGGTCATCACTGAAGTGTCCAAGGTGCCC
AGTCTATCCAAACTACTTGTCGTCTGGAATAATCAGAATAAAAACCCTCCAGAAGATTCTCTCTGGCCCA
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TCAAGGTAACCCCACGAAAGAAATTCAAGTGTCCTGAGTGCACAGCCATAGATGGGCTTTCACTAGACCA
AACACACATGGTGGAGAGGTCAGAGTGCATCAACAAGTTTGCTTCAGTCTTCGGGACCATGCCTCTCAAG
GTGGTGGAACACCGAGCTGACCCTGTCCTGTACAAAGATGACTTTCCTGAGAAGCTGAAGAGCTTCCCCA
ACATTGGCAGCTTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

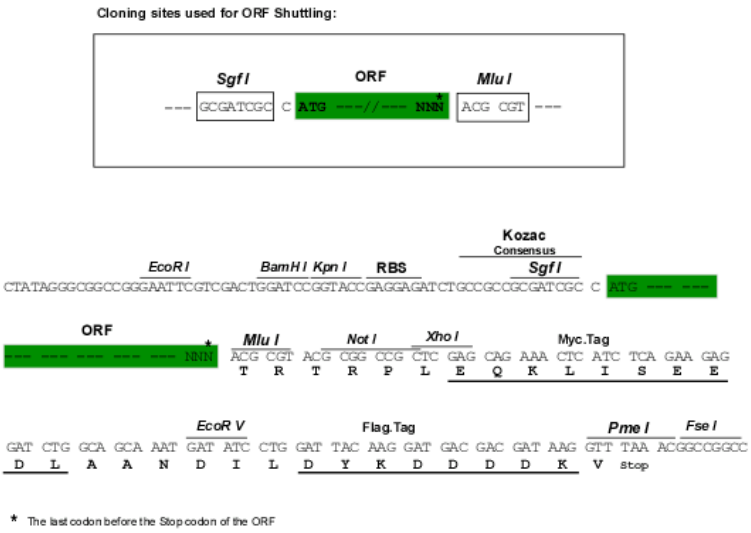
>RC230461 representing NM_001178083
Red=Cloning site Green=Tags(s)

MCASVKYNIRGPALIPRMKTKHRIYYITLFSIVLLGLIATGMFQFWPHSIESSNDWNVEKRSIRDVPVVR
LPADSPIPERGDLSCRMHTCFDVYRCGFNPKNKIKVYIYALKKYVDDFGVSVSNTISREYNELLMAISDS
DYYTDDINRACLFVPSIDVLNQNTLRIKETAQAMAQLSRWDRGTNHLLFNMLPGGPPDYNTALDVPRDRA
LLAGGGFSTWTYRQGYDVSIPVYSPLSAEVDLPEKGPGPRQYFLLSSQVGLHPEYREDLEALQVKHGESV
LVLDKCTNLSEGVLSVRKRCHKHQVFDYPQVLQEATFCVVLRGARLGQAVLSDVLQAGCVPVVIADSYIL
PFSEVLDWKRASVVVPEEKMSDVYSILQSIPQRQIEEMQRQLFMEPARRENWSAANHQMNSLIWPREQWD
SQIINDRIYPYAAISYEEWNDPPAVKWGSVSNPLFLPLIPPQSQGFTAIVLTYDRVESLFRVITEVSKVP
SLSKLLVVWNNQNKNPPEDSLWPKIRVPLKVVRTAENKLSNRFFPYDEIETEAVLAIDDDIIMLTSDELQ
FGYEVWREFPDRLVGYPGRLHLWDHEMNKWKYESEWTNEVSMVLTGAAFYHKYFNYLYTYKMPGDIKNWV
DAHMNCEDIAMNFLVANVTGKAVIKVTPRKKFKCPECTAIDGLSLDQTHMVERSECINKFASVFGTMPLK
VVEHRADPVLYKDDFPEKLKSFPNIGSL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**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).

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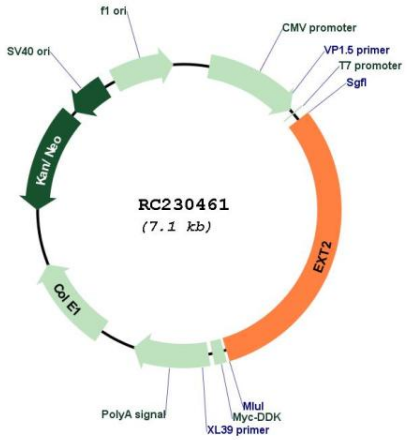
|---|---|
| **Reconstitution Method:** | 1. Centrifuge at 5,000xg for 5min.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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 ORF:** | 2187 bp |
| **Locus ID:** | 2132 |
| **UniProt ID:** | Q93063 |
| **Cytogenetics:** | 11p11.2 |
| **Protein Families:** | Druggable Genome, Transmembrane |
| **Protein Pathways:** | Heparan sulfate biosynthesis, Metabolic pathways |
| **MW:** | 84 kDa |
| **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 RC230461