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Product datasheet for RC221426

EXT2 (NM_000401) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EXT2 (NM_000401) 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:

>RC221426 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTGTGCGTCGGTCAAGTATAATATCCGGGGTCCTGCCCTCATCCCAAGAATGAAGACCAAGCACCGAA
TCTACTATATCACCCTCTTCTCCATTGTCCTCCTGGGCCTCATTGCCACTGGCATGTTTCAGTTTTGGCC
CCATTCTATCGAGTCCTCAAATGACTGGAATGTAGAGAAGCGCAGCATCCGTGATGTGCCGGTTGTTAGG
CTGCCAGCCGACAGTCCCATCCCAGAGCGGGGGGATCTCAGTTGCAGAATGCACACGTGTTTTGATGTCT
ATCGCTGTGGCTTCAACCCAAAGAACAAAATCAAGGTGTATATCTATGCTCTGAAAAAGTACGTGGATGA
CTTTGGCGTCTCTGTCAGCAACACCATCTCCCGGGAGTATAATGAACTGCTCATGGCCATCTCAGACAGT
GACTACTACACTGATGACATCAACCGGGCCTGTCTGTTTGTTCCCTCCATCGATGTGCTTAACCAGAACA
CACTGCGCATCAAGGAGACAGCACAAGCGATGGCCCAGCTCTCTAGGTGGGATCGAGGTACGAATCACCT
GTTGTTCAACATGTTGCCTGGAGGTCCCCCAGATTATAACACAGCCCTGGATGTCCCCAGAGACAGGGCC
CTGTTGGCTGGTGGCGGCTTTTCTACGTGGACTTACCGGCAAGGCTACGATGTCAGCATTCCTGTCTATA
GTCCACTGTCAGCTGAGGTGGATCTTCCAGAGAAAGGACCAGGTCCACGGCAATACTTCCTCCTGTCATC
TCAGGTGGGTCTCCATCCTGAGTACAGAGAGGACCTAGAAGCCCTCCAGGTCAAACATGGAGAGTCAGTG
TTAGTACTCGATAAATGCACCAACCTCTCAGAGGGTGTCCTTTCTGTCCGTAAGCGCTGCCACAAGCACC
AGGTCTTCGATTACCCACAGGTGCTACAGGAGGCTACTTTCTGTGTGGTTCTTCGTGGAGCTCGGCTGGG
CCAGGCAGTATTGAGCGATGTGTTACAAGCTGGCTGTGTCCCGGTTGTCATTGCAGACTCCTATATTTTG
CCTTTCTCTGAAGTTCTTGACTGGAAGAGAGCATCTGTGGTTGTACCAGAAGAAAAGATGTCAGATGTGT
ACAGTATTTTGCAGAGCATCCCCCAAAGACAGATTGAAGAAATGCAGAGACAGGCCCGGTGGTTCTGGGA
AGCGTACTTCCAGTCAATTAAAGCCATTGCCCTGGCCACCCTGCAGATTATCAATGACCGGATCTATCCA
TATGCTGCCATCTCCTATGAAGAATGGAATGACCCTCCTGCTGTGAAGTGGGGCAGCGTGAGCAATCCAC
TCTTCCTCCCGCTGATCCCACCACAGTCTCAAGGGTTCACCGCCATAGTCCTCACCTACGACCGAGTAGA
GAGCCTCTTCCGGGTCATCACTGAAGTGTCCAAGGTGCCCAGTCTATCCAAACTACTTGTCGTCTGGAAT
AATCAGAATAAAAACCCTCCAGAAGATTCTCTCTGGCCCAAAATCCGGGTTCCATTAAAAGTTGTGAGGA
CTGCTGAAAACAAGTTAAGTAACCGTTTCTTCCCTTATGATGAAATCGAGACAGAAGCTGTTCTGGCCAT
TGATGATGATATCATTATGCTGACCTCTGACGAGCTGCAATTTGGTTATGAGGTCTGGCGGGAATTTCCT
GACCGGTTGGTGGGTTACCCGGGTCGTCTGCATCTCTGGGACCATGAGATGAATAAGTGGAAGTATGAGT
CTGAGTGGACGAATGAAGTGTCCATGGTGCTCACTGGGGCAGCTTTTTATCACAAGTATTTTAATTACCT
GTATACCTACAAAATGCCTGGGGATATCAAGAACTGGGTAGATGCTCATATGAACTGTGAAGATATTGCC
ATGAACTTCCTGGTGGCCAACGTCACGGGAAAAGCAGTTATCAAGGTAACCCCACGAAAGAAATTCAAGT
GTCCTGAGTGCACAGCCATAGATGGGCTTTCACTAGACCAAACACACATGGTGGAGAGGTCAGAGTGCAT
CAACAAGTTTGCTTCAGTCTTCGGGACCATGCCTCTCAAGGTGGTGGAACACCGAGCTGACCCTGTCCTG
TACAAAGATGACTTTCCTGAGAAGCTGAAGAGCTTCCCCAACATTGGCAGCTTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC221426 protein sequence
Red=Cloning site Green=Tags(s)

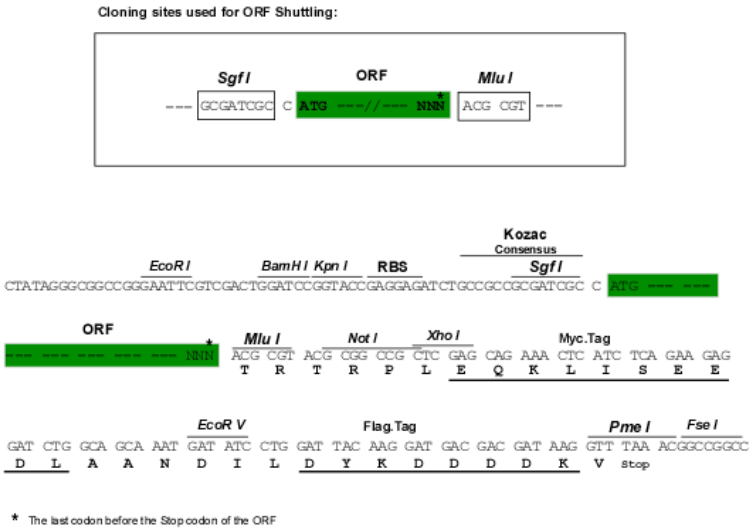
MCASVKYNIRGPALIPRMKTKHRIYYITLFSIVLLGLIATGMFQFWPHSIESSNDWNVEKRSIRDVPVVR
LPADSPIPERGDLSCRMHTCFDVYRCGFNPKNKIKVYIYALKKYVDDFGVSVSNTISREYNELLMAISDS
DYYTDDINRACLFVPSIDVLNQNTLRIKETAQAMAQLSRWDRGTNHLLFNMLPGGPPDYNTALDVPRDRA
LLAGGGFSTWTYRQGYDVSIPVYSPLSAEVDLPEKGPGPRQYFLLSSQVGLHPEYREDLEALQVKHGESV
LVLDKCTNLSEGVLSVRKRCHKHQVFDYPQVLQEATFCVVLRGARLGQAVLSDVLQAGCVPVVIADSYIL
PFSEVLDWKRASVVVPEEKMSDVYSILQSIPQRQIEEMQRQARWFWEAYFQSIKAIALATLQIINDRIYP
YAAISYEEWNDPPAVKWGSVSNPLFLPLIPPQSQGFTAIVLTYDRVESLFRVITEVSKVPSLSKLLVVWN
NQNKNPPEDSLWPKIRVPLKVVRTAENKLSNRFFPYDEIETEAVLAIDDDIIMLTSDELQFGYEVWREFP
DRLVGYPGRLHLWDHEMNKWKYESEWTNEVSMVLTGAAFYHKYFNYLYTYKMPGDIKNWVDAHMNCEDIA
MNFLVANVTGKAVIKVTPRKKFKCPECTAIDGLSLDQTHMVERSECINKFASVFGTMPLKVVEHRADPVL
YKDDFPEKLKSFPNIGSL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6568_b08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000401

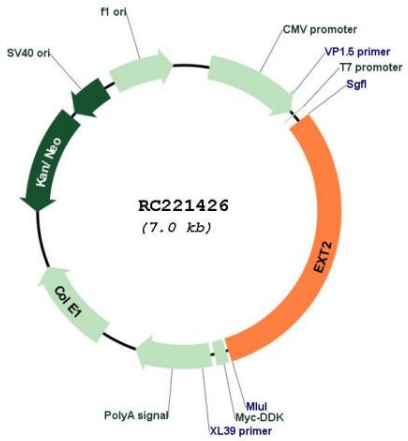
ORF Size: 2154 bp

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

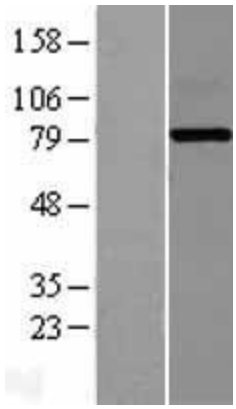
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	3469 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
MW:	82.3 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 RC221426



Western blot validation of overexpression lysate (Cat# [LY424741]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221426 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).