

Product datasheet for **MR210261**

Ext2 (NM_010163) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ext2 (NM_010163) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ext2
Synonyms:	A1893565
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>MR210261 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGTGTGCGTCAGTCAAGTCCAACATCCGGGGTCCCGCCCTCATCCCAAGGATGAAGACCAAGCACCGAA
TCTACTACGTCACCCTGTTCTCCATCGTCTCCTGGGCCTCATAGCCACGGGCATGTTTCAGTTCCTGGCC
TCACTCCATTGAGTCTCCAGTGTGGGGTGTGGAGAAACGCAGCATCAGGGAGGTGCCGTGGTCAGG
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ACCGCTGCGGCTTCAACCCAAAGAACAATAAAGGTGTACATCTACCCCTAAAAAAGTATGTGGATGA
TGCCGGTGTTCGGTGAGCAGCGCCATCTCCGGGAGTACAATGAACTGCTGACGGCCATCTCAGACAGC
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CCCTTCGAATAAAGGAGACGGCGCAGGCCCTGGCCAGCTTTCAGGTGGATCGAGGAACAATACCT
GCTGTTCAATATGTTGCCTGGAGCTCCCCAGATTACAACACTGCCCTGGATGTCCCAGAGACAGGGCA
CTGCTGGCTGGTGGCGGCTTTTCTACCTGGACTTACCGGCAGGGCTACGATGTCAGCATTCTGTTTTCA
GCCCACTGTCAGCTGAGATGGCTCTCCAGAGAAAGCACCAAGTCCCGCGCTACTTCCTACTGTCTCTC
TCAGATGGCCATCCACCCTGAGTACAGAGAGAACTAGAAGCCCTCCAGGCCAAACCAAGAGTCAAGT
TTAGTCTTGACAAAATGCACCAATCTCTCGGAGGGCGTCTGTCCGTGCGAAAGCGCTGCCACCAGCACC
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CCAGGCGGTGCTGAGCGATGTCTACAGGCTGGCTGTGTCCAGTTGTCATTGCAGACTCTATATTTCTG
CCTTTCTCTGAAGTCTGGACTGGAAGAGGGCATCTGTGGTCTTCCAGAGGAAAAGATGTCAGATGTGT
ACAGACTCTGCAGAACATCCCACAGAGGCAGATTGAAGAGATGCAGAGACAGGCACGGTGGTTCGGGA
GGCATACTCCAGTCCATTAAGGCCATTGCCCTGGCCACCCTACAGATCATCAATGACAGGATCTATCCA
TATGCAGCCATCTCCTATGAAGAGTGAATGACCTCCTGCTGTGAAGTGGGCTAGTGTGAGCAACCCGC
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GTACACCTACAAAATGCCTGGAGACATCAAGAAGTGGGTGGATGCTCACATGAACTGTGAAGATATTGCC
ATGAATTTTCTGGTGGCCAAATGTACAGGGAAAGCTGTCAAGGTAACCCCAAGGAAGAAGTTCAAGT
GTCCTGAGTGCACGGCCATCGACGGGCTCTCCCTAGACCAGACTCACATGGTAGAGAGATCTGAGTGCAT
CAACAAGTTTGCCTCCGTCTTCGGAACGATGCCCTCAAGGTGGTGGAGCACCGAGCGGACCCTGTCTCT
TACAAAGATGACTTCCCCGAGAACTGAAGAGCTTCCCCAACATTGGCAGCTTA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR210261 protein sequence
 Red=Cloning site Green=Tags(s)

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MCASVKSNIIRGALIPRMKTKHRIYYVTLFSIVLLGLIATGMFQFWPHSIESSSDGGVEKRSIREVPVVR
LPTDSPIPERGDLSRMTCTCFDHYRCGFNPKNKIKVYIYPLKKYVDDAGVPVSSAISREYNELLTAISDS
DYTTDDINRACLFVPSIDVNLQNPLRIKETAQALAQLSRWDRGTNHLFNMLPGAPPDYNTALDVPRDRA
LLAGGGFSTWYRQGYDVSIPVFSPLSAEMALPEKAPGPRRYFLLSSQMAIHPEYREELEALQAKHQESV
LVLDKCTNLSEGLSVRKRCHQHQVFDYPQVLQEATFCTVLRGARLGQAVLSDVLQAGCVPVVIADSYIL
PFSEVLWDKRAVVVPEEKMSDVYSILQNIQRIEEMQRQARWFWEAYFQSIKAIATLQIINDRIYP
YAAISYEEWNDPPAVKWASVSNPLFLPLIPPQSQGFTAI VLT YDRVESLFRVITEVSKVPSLSKLLVWN
NQNKNPPEESLWPKIRVPLKVVRTAENKLSNRFFPYDEIETEAVLAIDDDIIMLTSEDLQFGYEVWREFP
DRLVGYPGRLHLWDHEMNKWKYSEWTVNEVSMVLTGAAYHKYFNLYTYKMPGDIKNWVDAMHNCEDIA
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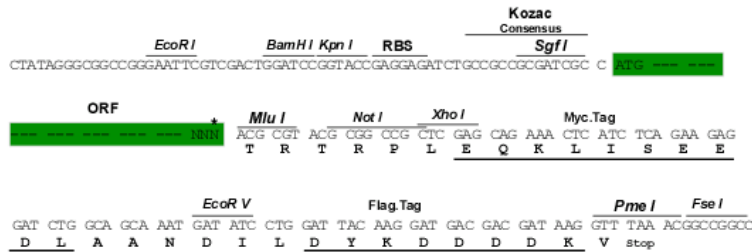
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_010163

ORF Size: 2157 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_010163.1](#), [NM_010163.2](#), [NM_010163.3](#), [NP_034293.1](#), [NP_034293.2](#)

RefSeq Size: 2875 bp

RefSeq ORF: 2157 bp

Locus ID: 14043

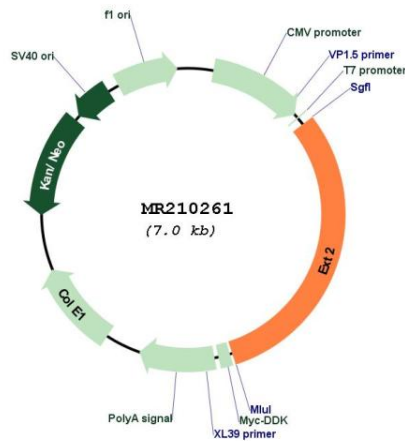
UniProt ID: [P70428](#)

Cytogenetics: 2 51.62 cM

MW: 82 kDa

Gene Summary: Glycosyltransferase required for the biosynthesis of heparan-sulfate. The EXT1/EXT2 complex possesses substantially higher glycosyltransferase activity than EXT1 or EXT2 alone. Appears to be a tumor suppressor. Required for the exosomal release of SDCBP, CD63 and syndecan. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR210261