

Product datasheet for **MR210422**

Ext1 (NM_010162) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ext1 (NM_010162) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ext1
Synonyms:	AA409028
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>MR210422 representing NM_010162
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCAGGCCAAAAACGCTATTTTCATCCTGCTCTCAGCTGGCTTGTCTCGCCCTTTTGTTTATTTTG
GAGGCGTGCAGTTTAGGGCATCGAGGAGCCACAGCCGGAGAGAAGAGCACAGTGGTCGGAATGGCTTGCA
CCAGCCCAGTCCGGATCATTCTGGCCCGCTTCCCGGACGCTCTGCGCCCTTTCTTTCCTTGGGATCAA
TTGAAAAACGAGGATTCCAGCGTGCACATTTCCCCCGGAGAGGAGAGCGCAACTCGAGCATCTACA
AAGGCAAGAAGTCCGCATGGAGTCTGCTTCGATTTACCCCTTTGCAAGAAAAACGGCTTCAAAGTCTA
CGTGTACCCGAGCAGAAAGGGGAGAAAATCGCCGAAAGTTACCAAAACATTCTAGCGGCCATCGAGGGC
TCCAGTTCTACACCTCGGACCCAGCCAGGCGTGCCTTTTGTCTTGAGTCTGGATACTTTAGACAGAG
ACCAGTTATCACCTCAGTATGTGCACAATTTGAGATCCAAAGTGCAGAGTCTCCACTTGTGGAACAATGG
TAGGAATCATTTAATTTTAATTTATATTTCTGGCACTTGGCTGACTACACTGAGGACGTGGGGTTTGAC
ATCGGCCAGGCGATGCTGGCCAAAGCCAGCATCAGTACTGAAAACCTCCGACCAAACCTTTGATGTTTCTA
TTCCCTCTTTTCTAAGGATCATCCAGGACAGGAGGGGAGAGGGGGTTTTTGAATTTAACACCATCCC
TCCTCTCAGGAAGTACATGCTGGTATTCAAGGGGAAGCGGTACCTGACAGGGATAGGGTCAGACACCAGG
AATGCCTTATATCACGTCCATAACGGGGAGGACGTCTTGTCTCCTACCACCTGCAAGCATGGCAAAGACT
GGCAAAAGCACAAGGATTCTCGCTGTGACAGAGACAACACCGAGTATGAGAAATATGATTATCGGGAAAT
GCTGCACAATGCCACTTTCTGTCTGGTTCTCGTGGTTCGAGGCTTGGGTCCTCAGATTCTGGAGGCT
TTGCAGGCTGCCTGTGTCCCTGTAATGCTCAGCAACGGATGGGAGTTGCCATTCTCCGAAGTGATTAATT
GGAAACAAAGTCCGTCATAGGCGATGAGAGATTGCTATTACAGATTCTTCTACAATCAGGTCTATTCA
TCAGGATAAAAATCCTAGCACTTAGACAGCAGACAGTTCCTTGTGGGAGGCTTATTTTCTTCAGTTGAG
AAGATTGTATTAACACTAGAGATTATTCAGGACAGAATATTCAAGCACATATCACGTAACAGTTTAA
TATGGAACAAACATCCTGGAGGATTGTTCTGCTCCTACCGCAGTATTCATCTTACCTGGGAGATTTCCCTTA
CTACTATGCTAATTTAGGTTTAAAGCCCCCTCCAAATCACTGCAGTATCCATGCTGTGACTCCCCTG
GTCTCTCAGTCCCAGCCAGTGTGAAGCTTCTTGTGGTGCAGCCAAATCCAGTACTGTGCGCAGATCA
TAGTTCTGTGGAATTGTGACAAGCCTCTACCAGCCAAACATCGCTGGCCTGCCACTGCCGTGCCTGTCAT
CGTCATTGAAGGAGAAAGCAAGTTATGAGCAGCCGTTTCTGCCCTATGACAACATCATCACTGATGCT
GTGCTCAGCCTGGATGAGGACACTGTGCTTTCACTACGGAAGTGGATTTTGCCTCACCATGATGCGAGA
GCTTCCCAGAGAGGATTGTGGGATATCCTGCTCGCAGTCAATTTCTGGGATAACTCAAAGGAGCGGTGGGG
ATATACATCCAAGTGGACGAATGACTACTCCATGGTGTGACAGGAGCTGCTATCTACCACAAATATTAT
CACTACCTGTATTTCCATTACCTGCCAGCCAGCCTGAAGAACATGGTAGACCAACTGGCCAACTGTGAGG
ACATTCTCATGAATTTCTGGTGTCTGTGTGACAAAAATGCCTCCAATCAAAGTGACCCAGAAGAAACA
GTATAAGGAGACAATGATGGGACAGACTTCCCAGCATCCCGCTGGGCCGACCCTGACCACTTTGCCAG
CGACAGAGCTGCATGAATACATTTGCCAGCTGGTTTGGCTACATGCCGCTGATCCATTCTCAGATGAGGC
TGGACCCGGTCTCTTTAAAGACCAAGTCTCAATTCGAGGAAGAAATACAGAGACATTGAACGACTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR210422 representing NM_010162
 Red=Cloning site Green=Tags(s)

MQAKKRYFILLSAGSCLALLFYFGGVQFRASRSHSRREEHSGRNLHQPSDFHWPRFPDALARPPFPWDQ
 LENEDSSVHISPRQKRDANSSIYKGGKCRMESCFDTLCKKNGFKVYVYPQQKGEKIAESYQNILAAIEG
 SRFYTSQPSQACLFVLSLDTLDRDQLSPQYVHNLRSKVQSLHLWNGRNLHIFNLVSGTWPDYTEDVGF
 IGQAMLAKASISTENFRPNFDVSIPLFSKDHPRTGGGERGFLKFNIPPLRKYMLVFKGKRYLTGIGSDTR
 NALYHVHNGEDVLLLTTCKHGKDWQKHKDSRCDRDNTEYEKYDYREMLHNATFCLVPRGRLGSFRFLEA
 LQAACVPVMLSNGWELPFSEVINWNQAAVIGDERLLLQIPSTIRSIHQDKILALRQQTQFLWEAYFSSVE
 KIVLTLEIIQDRIFKHISRNSLIWNKHPGLFVLPQYSSYLGDFFYYYANLGLKPPSKFTAVIHAVTPL
 VSQSQPVLLKLVAAAKSQYCAQIIVLWNCDKPLPAKHRWPATAVPVIVIEGESKVMSSRFLPYDNIITDA
 VLSLDEDTVLTSTEVDFAVTWQSFPERIVGYPARSHFWDNSKERWGYTSKWTNDYSMVLTGAAIYHKYY
 HYL YSHYLPASLKNMVDQLANCEDILMNFLVSAVTKLPPIKVTQKKQYKETMMGQTSRASRWADPDHFAQ
 RQSCMNTFASWFGYMLIHSQMRLDPVLFKDQVSI LRKKYRDIERL

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9013_d11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



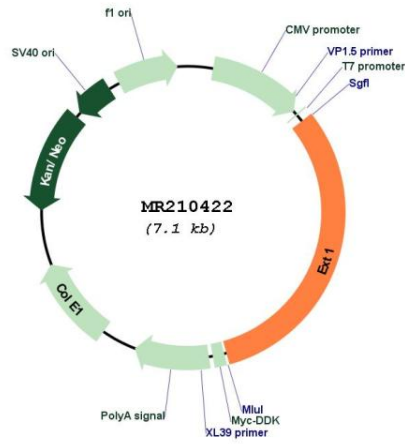
* The last codon before the Stop codon of the ORF

ACCN: NM_010162

ORF Size: 2238 bp

OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
OTI Annotation:	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
Components:	<p>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).</p>
Reconstitution Method:	<ol style="list-style-type: none">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:	<p>NM_010162.2, NP_034292.2</p>
RefSeq Size:	<p>3478 bp</p>
RefSeq ORF:	<p>2241 bp</p>
Locus ID:	<p>14042</p>
UniProt ID:	<p>P97464</p>
Cytogenetics:	<p>15 20.0 cM</p>
MW:	<p>86.8 kDa</p>
Gene Summary:	<p>Glycosyltransferase required for the biosynthesis of heparan-sulfate. The EXT1/EXT2 complex possesses substantially higher glycosyltransferase activity than EXT1 or EXT2 alone. Required for the exosomal release of SDCBP, CD63 and syndecan (By similarity).[UniProtKB/Swiss-Prot Function]</p>

Product images:



Circular map for MR210422