

Product datasheet for **MG210261**

Ext2 (NM_010163) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ext2 (NM_010163) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ext2
Synonyms:	A1893565
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>MG210261 representing NM_010163
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGTGTGCGTCAGTCAAGTCCAACATCCGGGGTCCCGCCCTCATCCCAAGGATGAAGACCAAGCACCGAA
TCTACTACGTACCCCTGTTCTCCATCGTCTCCTGGGCCTCATAGCCACGGGCATGTTTCAGTTCCTGGCC
TCACTCCATTGAGTCTCCAGTGATGGGGTGTGGAGAAACGCAGCATCAGGGAGGTGCCGTGGTCAGG
CTGCCACTGACAGCCCCATCCCAGAGCGGGGGATCTCAGCTGTAGAATGCATACGTGTTTCGATGTCT
ACCGCTGCGGCTTCAACCCAAAGAACAATAAAGGTGTACATCTACCCCTAAAAAGTATGTGGATGA
TGCCGGTGTTCGGTGAGCAGCGCCATCTCCGGGAGTACAATGAACTGCTGACGGCCATCTCAGACAGC
GACTACTACAGACGACATCAACGGGCTGTCTGTTCTGTCCTCCATTGACGTACTAAACCAGAACC
CCCTTCGAATAAAGGAGACGGCGCAGGCCCTGGCCAGCTTTCAGGTGGATCGAGGAACAATACCT
GCTGTTCAATATGTTGCCTGGAGCTCCCCAGATTACAACACTGCCCTGGATGTCCCAGAGACAGGGCA
CTGCTGGCTGGTGGCGGCTTTCTACCTGGACTTACCGGCAGGGCTACGATGTCAGCATTCTGTTTTCA
GCCCACTGTCAGCTGAGATGGCTCTCCAGAGAAAGCACCAGGTCCCGGCGCTACTTCCTACTGTCTCT
TCAGATGGCCATCCACCCTGAGTACAGAGAGGAAGTAGAAGCCCTCCAGGCCAAACCAAGAGTCAAGT
TTAGTCTTGACAAAATGCACCAATCTCTCGGAGGGCGTCTGTCCGTGCGAAAGCGCTGCCACCAGCACC
AGGTCTTCGATTACCCCAAGTGTCTGACAGGAGGCTACTTTTTGTACGGTCTTCGAGGAGCTCGGCTGGG
CCAGGCGGTGCTGAGCGATGTCTACAGGCTGGCTGTGTCCAGTTGTCATTGCAGACTCTATATTTCTG
CCTTTCTCTGAAGTCTGGACTGGAAGAGGGCATCTGTGGTCTGTCAGAGGAAAAGATGTCAGATGTGT
ACAGCATCTGCAGAACATCCCACAGAGGCAGATTGAAGAGATGCAGAGACAGGCAGGTGTTCTGGGA
GGCATACTCCAGTCCATTAAGCCATTGCCCTGGCCACCCTACAGATCATCAATGACAGGATCTATCCA
TATGCAGCCATCTCCTATGAAGAGTGAATGACCTCCTGCTGTGAAGTGGGCTAGTGTGAGCAACCCGC
TCTTCTGCCGCTGATCCCACCTCAGTCCCAAGGCTTCACTGCCATCGTCTCACCTACGACCGCTGGA
GAGCCTTTCGGGTGATCACCAGGTGTCCAAGGTGCCAGTCTGTCCAAGTGTGGTGGTCTGGAAT
AATCAGAATAAAAACCTCCGGAAGAATCTCTGTGGCCAAAATCCGAGTTCCTTGAAGTTGTGAGGA
CTGCAGAAAACAAGCTAAGTAACCGTTTCTTCCCTTACGACGAAATCGAGACAGAGGCCGTGCTGGCCAT
CGATGACGACATCATCATGCTGACCTCTGACGAGCTGCAGTTTGGTTATGAGGTCTGGCGGGAATTTCC
GACCGCTGGTGGCTACCCAGGCGCCTGCATCTCTGGGACCAGAGATGAACAAGTGAAGTATGAGT
CTGAATGGACCAATGAGGTGTCCATGGTGTCTACGGGCGCAGCCTTCTATCACAAGTATTTAATTACCT
GTACACCTACAAAATGCCTGGAGACATCAAGAAGTGGGTGGATGCTCACATGAACTGTGAAGATATTGCC
ATGAATTTTCTGGTGGCCAAATGTACAGGGAAAGCTGTCAAGGTAACCCCAAGGAAGAAGTTCAAGT
GTCCTGAGTGCACGGCCATCGACGGGCTCTCCCTAGACCAGACTCACATGGTAGAGAGATCTGAGTGCAT
CAACAAGTTTGCCTCCGTCTTCGGAACGATGCCCTCAAGGTGGTGGAGCACCGAGCGGACCCTGTCTCT
TACAAAGATGACTTCCCCGAGAAACTGAAGAGCTTCCCCAACATTGGCAGCTTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG210261 representing NM_010163
 Red=Cloning site Green=Tags(s)

MCASVKSNIIRGALIPRMKTKHRIYYVTLFSIVLLGLIATGMFQFWPHSIESSSDGGVEKRSIREVPVVR
 LPTDSPIPERGLDSCRMHTECFDVYRCGFNPKNKIKVYIYPLKKYVDDAGVPVSSAISREYNELLTAISDS
 DYYTDDINRACLFVPSIDVLNQNPLRIKETAQALAQLSRWDRGTNHLNFNMLPGAPPDYNTALDVPDRRA
 LLAGGGFSTWYRQGYDVSIPVFSPLSAEMALPEKAPGPRRYFLLSSQMAIHPEYREELEALQAKHQESV
 LVLDKCTNLSEGVL SVRKRCHQHVFQVLEATFCTVLRGARLGQAVLSDVLQAGCVPVVIADSYIL
 PFSEVLDWKRASVVVPEEKMSDVYSILQNIQRIEEMQRQARWFEAYFQSIKAIALATLQIINDRIYP
 YAAISYEEWNDPPAVKWASVSNPLFLPLIPPQSQGFTAI VLT YDRVESLFRVITEVSKVPSLSKLLVWN
 NQKNPPEESLWPKIRVPLKVVRTAENKLSNRFFPYDEIETEAVLAIDDDIIMLTSEDLQFGYEVWREFP
 DRLVGYPGRLHLWDHEMNKWKYESEWTVNEVSMVLTGAAYHKYFNLYTYKMPGDIKNWVDAMNCEDIA
 MNFLVANVTGKAVIKVTPRKKFKCPECTAIDGLSLDQTHMVERSEKINKFASVFGTMPLKVVHRADPVL
 YKDDFPEKLSFPNIGSL

TRTRPLE - GFP Tag - V

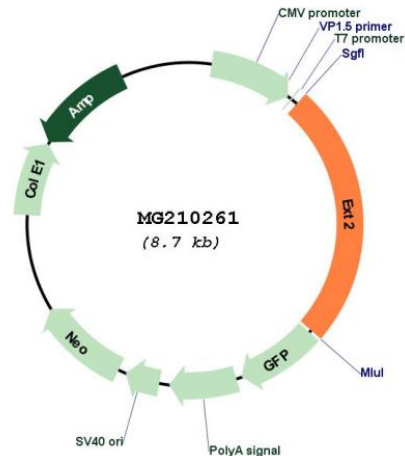
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_010163

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_010163.1](#), [NP_034293.1](#)

RefSeq Size: 2875 bp

RefSeq ORF: 2157 bp

Locus ID: 14043

UniProt ID: [P70428](#)

Cytogenetics: 2 51.62 cM

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]