

Product datasheet for **MG210480**

Loxl3 (BC011298) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Loxl3 (BC011298) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Loxl3
Synonyms:	Lor2, Loxl2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG210480 representing BC011298
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGAGCTGTCACTGTGTGGTATTGCTGCCCATGGGACTACTGCTGTACACTGTCTGTGCAGCTTCA
 GTGTGGGGTCTCCGTCTCCTTCTATCAGCCCAGAGAAGAAGGTAGGAAGCCAGGGGCTGAGGTTCCGGCT
 GGCTGGCTTTCCTAGAAAAGCCCTATGAAGGTCGAGTGGAGATACAGCGAGCTGGTGAATGGGGCACCATC
 TGTGATGATGACTTACGCTGCAGGCTGCCATGTCTCTGCCGGGAGCTGGGCTTACAGAAGCCACAG
 GGTGGACTCATAGTGCCAAATATGGCCCTGGAACAGGCCGAATCTGGTTGGACAATCTGAGCTGCAGGGG
 GACTGAAGGAAGTGTACAGAATGCGCCTCTCGGGGCTGGGAAACAGTACTGTACCCATGATGAGGAT
 GCCGGGTCATCTGCAAGGACCAGCGCCTTCCCGTTTCTCAGACTCCAACGTCATTGAGGTGGAGCATC
 AGTTGCAAGTGGAGGAGTGCAGCTCCGACCTGCGGTGGAGTGGGAAGGAGACCCCTGCCTGTGACTGA
 GGGCCTGGTTGAAGTCAAGCTTCTGAAGGCTGGTCGAAAGTGTGTGACAAAGGCTGGAGTGGCCACAAC
 AGCCACGTAGTCTGCGGTATGCTGGGCTTCCCTGGAGAAAAGAGAGTCAACATGGCCTTCTACAGGATGC
 TGGCCCAAGAAGAACAACACTCCTTTGGTCTGCACAGTGTGGCATGTGTGGGCACAGAAGCCACCTCTC
 CCTTTGCTCTCTAGAGTTCTATCGTGCCAAATGACACCACAGGTGCTCTGGGGGAAACCCTGCAGTGGTG
 AGCTGTGTGCTGGGCCCTCTTTATGCCACCTTTACTGGTCAGAAGAAGCAGCAACACTCTAAGCCTCAAG
 GGGAGGCTCGTGTGCGTCTAAAGGGTGGTGCCACCAGGGAGAAGGCAGAGTGAAGTCTGAAGGCTGG
 CACATGGGGAACAGTCTGTGACCGAAAGTGGGACTGCAGGCAGCCAGTGTGGTGTGTGAGAACTGGGC
 TTTGGCACTGCCGAGAGGCCCTGAGTGGTCCCGCATGGGCAAGGCATGGGTGCCATCCACTTGAAGT
 AAGTTCGGTGTCTGCGCAGGAGCCCTCCCTTTGGAGATGCCCGTCCAAGAACATCACAGTGGAGACTG
 TTCCACAGCCAGGATGCGGGTGTCCGGTGCAACCTCCCTACACTGGGGTGGAGACCAAGATCCGACTC
 AGTGGGGGCCGACGCGGTATGAAGGGCAGTTCGAGGTGCAAATAGGGATACCTGGGCATCTACGCTGGG
 GCCTCATCTGTGGGGATGACTGGGGAACCCTGGAGGCCATGGTGGCCTGTAGGCAACTTGGTCTTGCTA
 CGCCAACCACGGCCTGCAGGAGACCTGGTACTGGGACTCAGGGAATGTAAGTGGTGGTGTGAGCGGA
 GTGCGTTGCACGGGGTCTGAGCTGTCCCTGAACCAGTGTGCCATCACAGCAGCCACATCACCTGCAAGA
 AGACGGGAACCCGCTTCACTGCGGGGTCATCTGTTCTGAACTGCTTCAAGTCTGCTGCTGCACTCGGC
 ACTGGTACAGGAACTGCTTATATTGAAGACCGGCCCTTGACATGTTGTACTGTGCTGTAAGAGAAC
 TGCTTGCTAGCTCTGCCGCTCGGCCAACTGGCCTTATGGCCACCGGCTGTGCTCCGATTCTCTTCCC
 AGATCCACAACCTAGGAAGAGCTGACTTTAGGCCAAGGCTGGGCGCCATTCCCTGGGTGTGGCATGAGTG
 TCATGGGCATTACCACAGTATGGACATCTTCACTCATTATGATATCCTGACCCCCAATGGCACCAGGTTG
 GCTGAGGGCCACAAAGCTAGTTTCTGTCTAGAAGACACTGAGTGTCAAGAGGATGTCTCCAAGAGGTATG
 AGTGGCCAACTTTGGAGAGCAGGGCATCACCGTGGGATGTTGGGATCTCTACAGGCATGACATTGACTG
 TCAGTGGATCGACATCACAGATGTGAAGCCAGGAACTACATTCTCAGGTGCTTATCAACCCAAATTTT
 GAGGTAGCAGAAAGTACTTACCAACAATGCAATGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGA
 GGGTGCACAACTGCCACATCGGTGATGCCTTCAAGCAAGAAGCCAAACAGGAGTTTGAGCGCTACCCTGG
 CCAGACTAGTAACCAGATCGTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

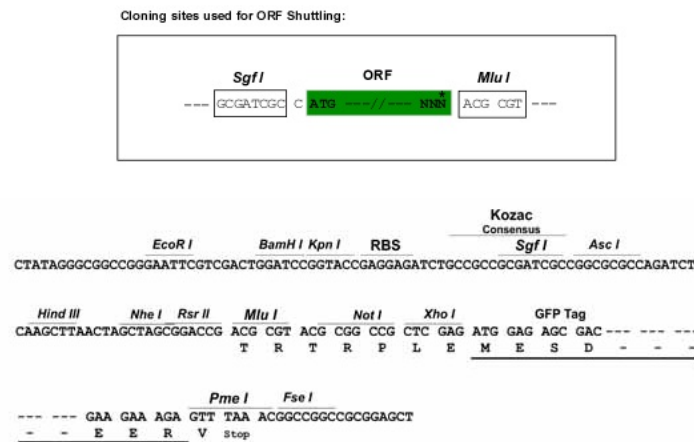
Protein Sequence: >MG210480 representing BC011298
Red=Cloning site Green=Tags(s)

```
MRAVSVWYCCPWGLLLLHCLCSFVSGSPSPSISPEKKVGSQGLRFRLAGFPRKPYEGRVEIQRAGEWGTI
CDDDFTLQAAHVLCRELGFTEATGWTHSAKYGPGTGRIWLDNLSCRGTEGSVTECASRGWGNSDCTHDED
AGVICKDQRLPGFSDSNVIEVEHQLQVEEVRLRPAVEWGRRPLPVTEGLVEVRLPEGWSQVCDKGSVAHN
SHVVCGLMFGPEKRVNMAFYRMLAQKKQHSFGLHSVACVGTAEHLSLCSLEFYRANDTTRCSGGNPAVV
SCVLGPLYATFTGQKKQHSKQPGEARVRLKGGAHQGEGRVEVLKAGTWGTVCDRWDLQAASVVCRELG
FGTAREALSGARMQGMGAHILSEVRCSSQEPSSLWRCPKSKNITAEDCSHSQDAGVRCNLPYTGVEVKIRL
SGGRSRYEGRVEVQIGIPGHLRWGLICGDDWGTLEAMVACRQLGLGYANHGLQETWYWDSGNVTEVVMSSG
VRCTGSELNLCQCAHSSSHITCKKTGTRFTAGVICSETASDLLLHSAVQETAYIEDRPLHMLYCAAEEN
CLASSARSANWPYGHRRLLRFSSQIHNLGRADFRPKAGRHSWVWHECHGHYHSMDFTHYDILTPNGTKV
AEGHKASFLEDTECQEDVSKRYECANFGEQGITVGCWDLYRHDIDCQWIDITDVKPGNYILQVVINPNF
EVAESDFTNAMKCNCKYDGHRIWVHNCHIGDAFSEEANRRRFRERYPGQTSNQIV
```

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: BC011298

ORF Size: 2264 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: [BC011298](#), [AAH11298](#)

RefSeq Size: 2837 bp

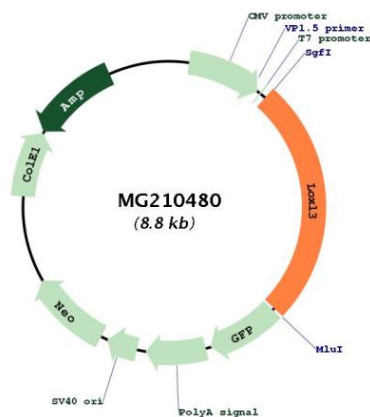
RefSeq ORF: 2264 bp

Locus ID: 16950

Cytogenetics: 6 35.94 cM

Gene Summary: Protein-lysine 6-oxidase that mediates the oxidation of peptidyl lysine residues to allysine in target proteins (PubMed:26954549). Catalyzes the post-translational oxidative deamination of peptidyl lysine residues in precursors of elastin and different types of collagens, a prerequisite in the formation of cross-links between collagens and elastin (PubMed:26307084). Required for somite boundary formation by catalyzing oxidation of fibronectin (FN1), enhancing integrin signaling in myofibers and their adhesion to the myotendinous junction (MTJ) (PubMed:26954549). Acts as a regulator of inflammatory response by inhibiting differentiation of naive CD4(+) T-cells into T-helper Th17 or regulatory T-cells (Treg): acts by interacting with STAT3 in the nucleus and catalyzing both deacetylation and oxidation of lysine residues on STAT3, leading to disrupt STAT3 dimerization and inhibit STAT3 transcription activity (PubMed:28065600). Oxidation of lysine residues to allysine on STAT3 preferentially takes place on lysine residues that are acetylated (By similarity). Also able to catalyze deacetylation of lysine residues on STAT3 (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG210480

