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Product datasheet for RC200455

LOXL2 (NM_002318) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LOXL2 (NM_002318) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	LOXL2
Synonyms:	LOR; LOR2; WS9-14
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC200455 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGAGGCCTCTGTGCTCCCACCTCTGCAGCTGCCTGGCTATGCTGGCCCTCCTGTCCCCCCTGAGCC
TGGCACAGTATGACAGCTGGCCCCATTACCCCGAGTACTTCCAGCAACCGGCTCCTGAGTATCACCAGCC
CCAGGCCCCCGCCAACGTGGCCAAGATTCAGCTGCGCCTGGCTGGGCAGAAGAGGAAGCACAGCGAGGGC
CGGGTGGAGGTGTACTATGATGGCCAGTGGGGCACCGTGTGCGATGACGACTTCTCCATCCACGCTGCCC
ACGTCGTCTGCCGGGAGCTGGGCTACGTGGAGGCCAAGTCCTGGACTGCCAGCTCCTCCTACGGCAAGGG
AGAAGGGCCCATCTGGTTAGACAATCTCCACTGTACTGGCAACGAGGCGACCCTTGCAGCATGCACCTCC
AATGGCTGGGGCGTCACTGACTGCAAGCACACGGAGGATGTCGGTGTGGTGTGCAGCGACAAAAGGATTC
CTGGGTTCAAATTTGACAATTCGTTGATCAACCAGATAGAGAACCTGAATATCCAGGTGGAGGACATTCG
GATTCGAGCCATCCTCTCAACCTACCGCAAGCGCACCCCAGTGATGGAGGGCTACGTGGAGGTGAAGGAG
GGCAAGACCTGGAAGCAGATCTGTGACAAGCACTGGACGGCCAAGAATTCCCGCGTGGTCTGCGGCATGT
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GTGTCACTGGACCCCATGAAGAATGTCACCTGCGAGAATGGGCTACCGGCCGTGGTGAGTTGTGTGCCTG
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ACTGAGAGGCGGTGCCTACATCGGGGAGGGCCGCGTGGAGGTGCTCAAAAATGGAGAGTGGGGGACCGTC
TGCGACGACAAGTGGGACCTGGTGTCGGCCAGTGTGGTCTGCAGAGAGCTGGGCTTTGGGAGTGCCAAAG
AGGCAGTCACTGGCTCCCGACTGGGGCAAGGGATCGGACCCATCCACCTCAACGAGATCCAGTGCACAGG
CAATGAGAAGTCCATTATAGACTGCAAGTTCAATGCCGAGTCTCAGGGCTGCAACCACGAGGAGGATGCT
GGTGTGAGATGCAACACCCCTGCCATGGGCTTGCAGAAGAAGCTGCGCCTGAACGGCGGCCGCAATCCCT
ACGAGGGCCGAGTGGAGGTGCTGGTGGAGAGAAACGGGTCCCTTGTGTGGGGGATGGTGTGTGGCCAAAA
CTGGGGCATCGTGGAGGCCATGGTGGTCTGCCGCCAGCTGGGCCTGGGATTCGCCAGCAACGCCTTCCAG
GAGACCTGGTATTGGCACGGAGATGTCAACAGCAACAAAGTGGTCATGAGTGGAGTGAAGTGCTCGGGAA
CGGAGCTGTCCCTGGCGCACTGCCGCCACGACGGGGAGGACGTGGCCTGCCCCCAGGGCGGAGTGCAGTA
CGGGGCCGGAGTTGCCTGCTCAGAAACCGCCCCTGACCTGGTCCTCAATGCGGAGATGGTGCAGCAGACC
ACCTACCTGGAGGACCGGCCCATGTTCCTGCTGCAGTGTGCCATGGAGGAGAACTGCCTCTCGGCCTCAG
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CGATCAGGGCATCACCATGGGCTGCTGGGACATGTACCGCCATGACATCGACTGCCAGTGGGTTGACATC
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ATTACTCCAACAACATCATGAAATGCAGGAGCCGCTATGACGGCCACCGCATCTGGATGTACAACTGCCA
CATAGGTGGTTCCTTCAGCGAAGAGACGGAAAAAAAGTTTGAGCACTTCAGCGGGCTCTTAAACAACCAG
CTGTCCCCGCAG

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC200455 protein sequence
Red=Cloning site Green=Tags(s)

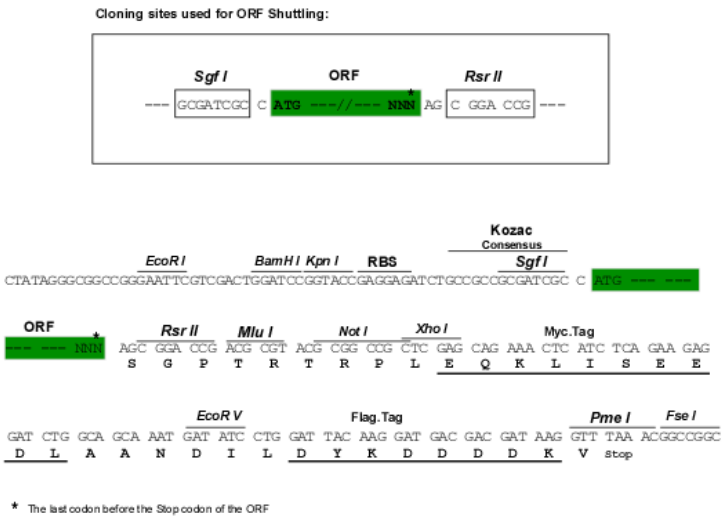
MERPLCSHLCSCLAMLALLSPLSLAQYDSWPHYPEYFQQPAPEYHQPQAPANVAKIQLRLAGQKRKHSEG
RVEVYYDGQWGTVCDDDFSIHAAHVVCRELGYVEAKSWTASSSYGKGEGPIWLDNLHCTGNEATLAACTS
NGWGVTDCKHTEDVGVVCSDKRIPGFKFDNSLINQIENLNIQVEDIRIRAILSTYRKRTPVMEGYVEVKE
GKTWKQICDKHWTAKNSRVVCGMFGFPGERTYNTKVYKMFASRRKQRYWPFSMDCTGTEAHISSCKLGPQ
VSLDPMKNVTCENGLPAVVSCVPGQVFSPDGPSRFRKAYKPEQPLVRLRGGAYIGEGRVEVLKNGEWGTV
CDDKWDLVSASVVCRELGFGSAKEAVTGSRLGQGIGPIHLNEIQCTGNEKSIIDCKFNAESQGCNHEEDA
GVRCNTPAMGLQKKLRLNGGRNPYEGRVEVLVERNGSLVWGMVCGQNWGIVEAMVVCRQLGLGFASNAFQ
ETWYWHGDVNSNKVVMSGVKCSGTELSLAHCRHDGEDVACPQGGVQYGAGVACSETAPDLVLNAEMVQQT
TYLEDRPMFLLQCAMEENCLSASAAQTDPTTGYRRLLRFSSQIHNNGQSDFRPKNGRHAWIWHDCHRHYH
SMEVFTHYDLLNLNGTKVAEGHKASFCLEDTECEGDIQKNYECANFGDQGITMGCWDMYRHDIDCQWVDI
TDVPPGDYLFQVVINPNFEVAESDYSNNIMKCRSRYDGHRIWMYNCHIGGSFSEETEKKFEHFSGLLNNQ
LSPQ

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6185_e07.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_002318

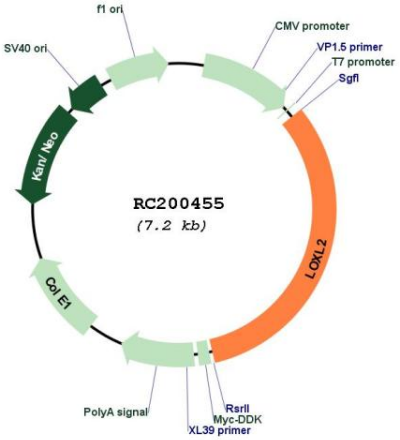
ORF Size: 2322 bp

OTI Disclaimer: 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.

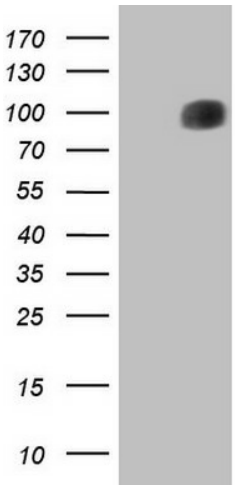
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_002318.3
RefSeq Size:	3810 bp
RefSeq ORF:	2325 bp
Locus ID:	4017
UniProt ID:	Q9Y4K0
Cytogenetics:	8p21.3
Domains:	SR, Lysyl_oxidase
Protein Families:	Druggable Genome, Secreted Protein
MW:	86.7 kDa
Gene Summary:	This gene encodes a member of the lysyl oxidase gene family. The prototypic member of the family is essential to the biogenesis of connective tissue, encoding an extracellular copper-dependent amine oxidase that catalyses the first step in the formation of crosslinks in collagens and elastin. A highly conserved amino acid sequence at the C-terminus end appears to be sufficient for amine oxidase activity, suggesting that each family member may retain this function. The N-terminus is poorly conserved and may impart additional roles in developmental regulation, senescence, tumor suppression, cell growth control, and chemotaxis to each member of the family. [provided by RefSeq, Jul 2008]

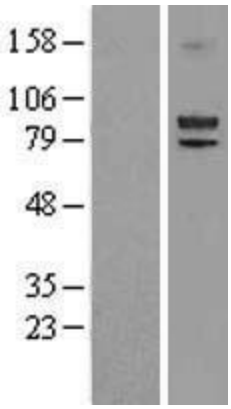
Product images:



Circular map for RC200455



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY LOXL2 (Cat# RC200455, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-LOXL2 (Cat# [TA807444])(1:2000). Positive lysates [LY400844] (100ug) and [LC400844] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400844]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200455 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).