

Product datasheet for **RG218891**

LEPREL1 (P3H2) (NM_018192) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	LEPREL1
Synonyms:	LEPREL1; MCVD; MLAT4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG218891 representing NM_018192
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGCGGGAGCGCATCTGGGCGCCGCGCTGCTGCTGCTGCTGCCGCTGCTACTGCCGCCGCACTGTGGG
 GCGGCCCGCCGACAGCCACGCCGGAGCTGGAGCTGGAGCCCGGCCCTCTGCAGCCCTTCGACCTGCT
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 TGAAGGCAGTCACCAAGGGAAGAGGTGTGCTGTGGCTCTGTGGTTACCTTGGACCACTTTATAGAGA
 ATTGGAGCGAATACAGGCTGATGAAGTGATTGCAATTCTGGATCAAGAACAGCAAGGGAAGCATGAACG
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

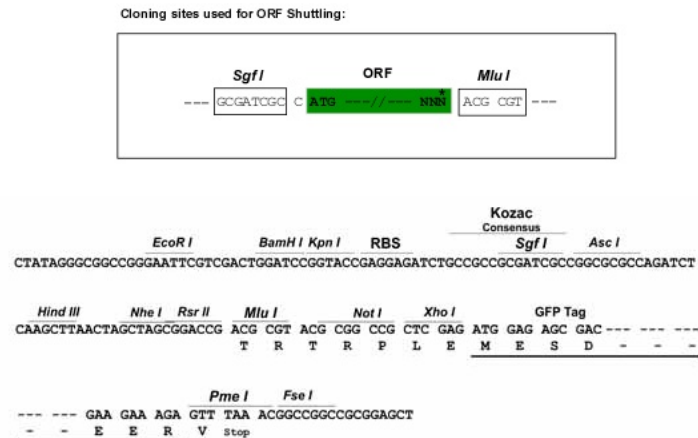
Protein Sequence: >RG218891 representing NM_018192
 Red=Cloning site Green=Tags(s)

MRERIWAPLLLLLLPLPPPLWGGPPDSPRRELELEPGPLQPFDLLYASGAAAYYSGDYERAVRDLEAA
 LRSHRRLREIRTRCARHCAARHPLPPPPGEGPGAELPLFRSLGRARCYRSCETQRLGGPASRHRVSED
 VRSDFORRVYPYNYLQRAYIKLNQLEKAVEAAHTFFVANPEHMEMQQNIENYRATAGVEALQLVDREAKPH
 MESYNAGVKHYEADDFEMAIRHFEQALREYFVEDTECRCLCEGPQRFEYELGYKAGLYEAIADHYMQV
 LVCQHECVRELATRPGRLSPIENFLPLHYDYLQFAYYRVGEYVKALECAKAYLLCHPDDDEDVLDNVDYVE
 SLLDDSIDPASIEAREDLTMFVKRHKLESELKSAEGLGFSYTEPNYWIYRGGQDENRVP SGVNVEGA
 EVHGFSGMKKLSPKIDRDLREGGPLLYENITFYVNSEQLNGTQVRLLDNVLSEEQCRELHVSASGIMLVG
 DGYRGKTSPTNEKFEGATVLKALKSGYEGRVPLKSARLFYDISEKARRIVESYFMLNSTLYFSYTHMV
 CRTALSGQQDRRNDLSHPIHADNCLLDPEANECWKEPPAYTFRDYSALLYMNDDEGGEFIFTEMDAKTV
 TASIKPKCGRMISFSSGGENPHGVKAVTKGKRCALWFTLDPLYRELERIQADEVIAILDQEQQGKHEL
 NINPKDEL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_018192

ORF Size: 2124 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.

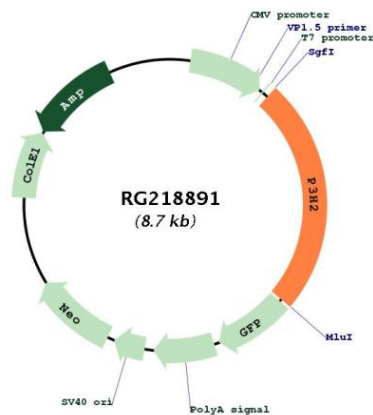
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_018192.4](#)

RefSeq Size:	3715 bp
RefSeq ORF:	2127 bp
Locus ID:	55214
UniProt ID:	Q8IVL5
Cytogenetics:	3q28
Domains:	2OG-Fell_Oxy, P4Hc

Gene Summary: This gene encodes a member of the prolyl 3-hydroxylase subfamily of 2-oxo-glutarate-dependent dioxygenases. These enzymes play a critical role in collagen chain assembly, stability and cross-linking by catalyzing post-translational 3-hydroxylation of proline residues. Mutations in this gene are associated with nonsyndromic severe myopia with cataract and vitreoretinal degeneration, and downregulation of this gene may play a role in breast cancer. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Dec 2011]

Product images:



Circular map for RG218891