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Product datasheet for RC215158

EGLN1 (NM_022051) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EGLN1 (NM_022051) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EGLN1
Synonyms:	C1orf12; ECYT3; HALAH; HIF-PH2; HIFPH2; HPH-2; HPH2; PHD2; SM20; ZMYND6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

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ORF Nucleotide Sequence:

>RC215158 representing NM_022051
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCAATGACAGCGGCGGGCCCGGCGGGCCGAGCCCGAGCGAGCGAGACCGGCAGTACTGCGAGCTGT
GCGGGAAGATGGAGAACCTGCTGCGCTGCAGCCGCTGCCGCAGCTCCTTCTACTGCTGCAAGGAGCACCA
GCGTCAGGACTGGAAGAAGCACAAGCTCGTGTGCCAGGGCAGCGAGGGCGCCCTCGGCCACGGAGTGGGC
CCACACCAGCATTCCGGCCCCGCGCCGCCGGCTGCAGTGCCGCCGCCCAGGGCCGGGGCCCGGGAGCCCA
GGAAGGCAGCGGCGCGCCGGGACAACGCCTCCGGGGACGCGGCCAAGGGAAAAGTAAAGGCCAAGCCCCC
GGCCGACCCAGCGGCGGCCGCGTCGCCGTGTCGTGCGGCCGCCGGCGGCCAGGGCTCGGCGGTGGCTGCC
GAAGCCGAGCCCGGCAAGGAGGAGCCGCCGGCCCGCTCATCGCTGTTCCAGGAGAAGGCGAACCTGTACC
CCCCAAGCAACACGCCCGGGGATGCGCTGAGCCCCGGCGGCGGCCTGCGGCCCAACGGGCAGACGAAGCC
CCTGCCGGCGCTGAAGCTGGCGCTCGAGTACATCGTGCCGTGCATGAACAAGCACGGCATCTGTGTGGTG
GACGACTTCCTCGGCAAGGAGACCGGACAGCAGATCGGCGACGAGGTGCGCGCCCTGCACGACACCGGGA
AGTTCACGGACGGGCAGCTGGTCAGCCAGAAGAGTGACTCGTCCAAGGACATCCGAGGCGATAAGATCAC
CTGGATCGAGGGCAAGGAGCCCGGCTGCGAAACCATTGGGCTGCTCATGAGCAGCATGGACGACCTGATA
CGCCACTGTAACGGGAAGCTGGGCAGCTACAAAATCAATGGCCGGACGAAAGCCATGGTTGCTTGTTATC
CGGGCAATGGAACGGGTTATGTACGTCATGTTGATAATCCAAATGGAGATGGAAGATGTGTGACATGTAT
ATATTATCTTAATAAAGACTGGGATGCCAAGGTAAGTGGAGGTATACTTCGAATTTTTCCAGAAGGCAAA
GCCCAGTTTGCTGACATTGAACCCAAATTTGATAGACTGCTGTTTTTCTGGTCTGACCGTCGCAACCCTC
ATGAAGTACAACCAGCATATGCTACAAGGTACGCAATAACTGTTTGGTATTTTGATGCAGATGAGAGAGC
ACGAGCTAAAGTAAAATATCTAACAGGTGAAAAAGGTGTGAGGGTTGAACTCAATAAACCTTCAGATTCG
GTCGGTAAAGACGTCTTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC215158 representing NM_022051
Red=Cloning site Green=Tags(s)

MANDSGGPGGPSPSERDRQYCELCGKMENLLRCSRCRSSFYCCKEHQRQDWKKHKLVCQGSEGALGHGVG
PHQHSGPAPPAAVPPPRAGAREPRKAAARRDNASGDAAKGKVKAKPPADPAAAASPCRAAAGGQGSAVAA
EAEPGKEEPPARSSLFQEKANLYPPSNTPGDALSPGGGLRPNGQTKPLPALKLALEYIVPCMNKHGICVV
DDFLGKETGQQIGDEVRALHDTGKFTDGQLVSQKSDSSKDIRGDKITWIEGKEPGCETIGLLMSSMDDLI
RHCNGKLGSYKINGRTKAMVACYPGNGTGYVRHVDNPNGDGRCVTCIYYLNKDWDAKVSGGILRIFPEGK
AQFADIEPKFDRLLFFWSDRRNPHEVQPAYATRYAITVWYFDADERARAKVKYLTGEKGVRVELNKPSDS
VGKDVF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2669_e01.zip

Restriction Sites: SgfI-MluI

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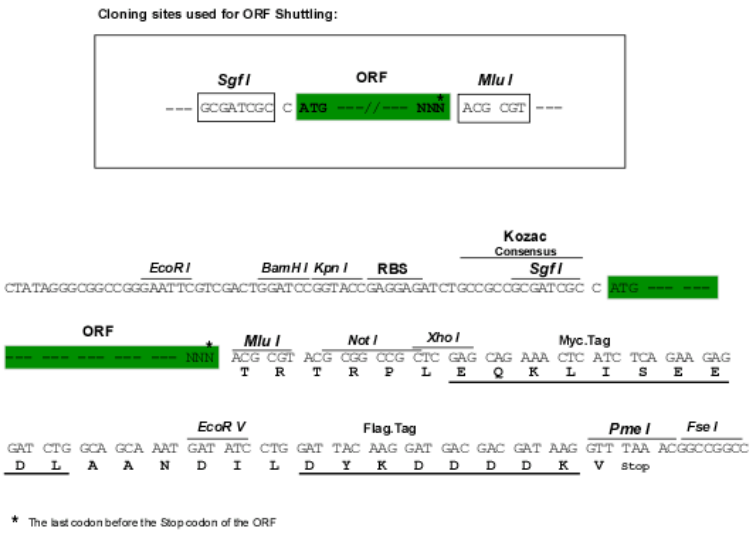
Cloning Scheme:



ACCN: NM_022051

ORF Size: 1278 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.

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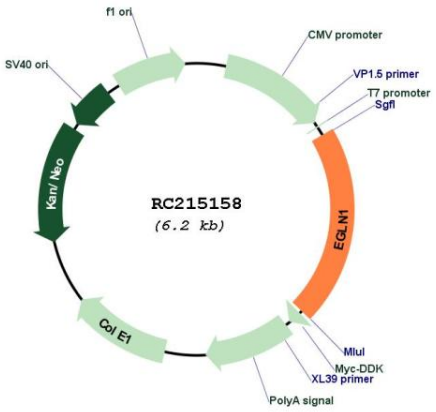
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_022051.3
RefSeq Size:	7102 bp
RefSeq ORF:	1281 bp
Locus ID:	54583
UniProt ID:	Q9GZT9
Cytogenetics:	1q42.2
Domains:	zf-MYND, 2OG-FeII_Oxy, P4Hc
Protein Pathways:	Pathways in cancer, Renal cell carcinoma
MW:	46.5 kDa
Gene Summary:	The protein encoded by this gene catalyzes the post-translational formation of 4-hydroxyproline in hypoxia-inducible factor (HIF) alpha proteins. HIF is a transcriptional complex that plays a central role in mammalian oxygen homeostasis. This protein functions as a cellular oxygen sensor, and under normal oxygen concentration, modification by prolyl hydroxylation is a key regulatory event that targets HIF subunits for proteasomal destruction via the von Hippel-Lindau ubiquitylation complex. Mutations in this gene are associated with erythrocytosis familial type 3 (ECYT3). [provided by RefSeq, Nov 2009]

Product images:



Circular map for RC215158

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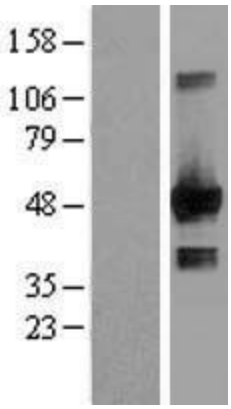

Western blot validation of overexpression lysate (Cat# [LY402911]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215158 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

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