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Product datasheet for RG203708

Reticulocalbin 3 (RCN3) (NM_020650) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Reticulocalbin 3 (RCN3) (NM_020650) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Reticulocalbin 3
Synonyms:	RLP49
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG203708 representing NM_020650
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGATGTGGCGACCATCAGTTCTGCTGCTTCTGTTGCTACTGAGGCACGGGGCCCAGGGGAAGCCATCCC
CAGACGCAGGCCCTCATGGCCAGGGGAGGGTGCACCAGGCGGCCCCCCTGAGCGACGCTCCCCATGATGA
CGCCCACGGGAACTTCCAGTACGACCATGAGGCTTTCCTGGGACGGGAAGTGGCCAAGGAATTCGACCAA
CTCACCCCAGAGGAAAGCCAGGCCCGTCTGGGGCGGATCGTGGACCGCATGGACCGCGCGGGGGACGGCG
ACGGCTGGGTGTCGCTGGCCGAGCTTCGCGCGTGGATCGCGCACACGCAGCAGCGGCACATACGGGACTC
GGTGAGCGCGGCCTGGGACACGTACGACACGGACCGCGACGGGCGTGTGGGTTGGGAGGAGCTGCGCAAC
GCCACCTATGGCCACTACGCGCCCGGTGAAGAATTTCATGACGTGGAGGATGCAGAGACCTACAAAAAGA
TGCTGGCTCGGGACGAGCGGCGTTTCCGGGTGGCCGACCAGGATGGGGACTCGATGGCCACTCGAGAGGA
GCTGACAGCCTTCCTGCACCCCGAGGAGTTCCCTCACATGCGGGACATCGTGATTGCTGAAACCCTGGAG
GACCTGGACAGAAACAAAGATGGCTATGTCCAGGTGGAGGAGTACATCGCGGATCTGTACTCAGCCGAGC
CTGGGGAGGAGGAGCCGGCGTGGGTGCAGACGGAGAGGCAGCAGTTCCGGGACTTCCGGGATCTGAACAA
GGATGGGCACCTGGATGGGAGTGAGGTGGGCCACTGGGTGCTGCCCCCTGCCCAGGACCAGCCCCTGGTG
GAAGCCAACCACCTGCTGCACGAGAGCGACACGGACAAGGATGGGCGGCTGAGCAAAGCGGAAATCCTGG
GTAATTGGAACATGTTTGTGGGCAGTCAGGCCACCAACTATGGCGAGGACCTGACCCGGCACCACGATGA
GCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

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Protein Sequence:

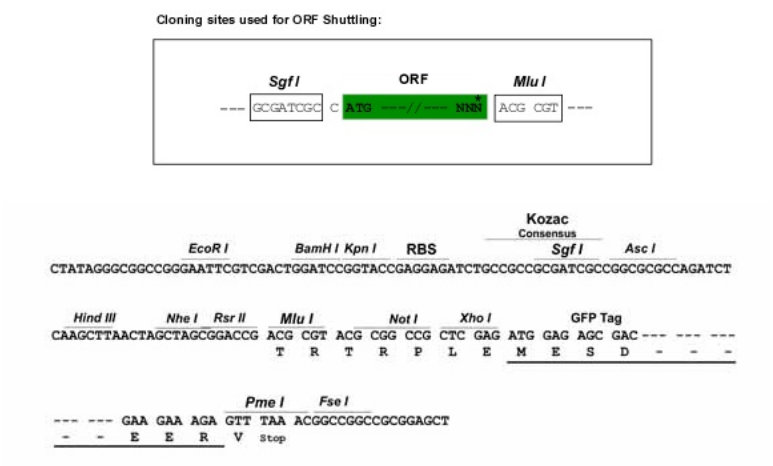
>RG203708 representing NM_020650
Red=Cloning site Green=Tags(s)

MMWRPSVLLLLLLLRHGAQGKPSPDAGPHGQGRVHQAAPLSDAPHDDAHGNFQYDHEAFLGREVAKEFDQ
LTPEESQARLGRIVDRMDRAGDGDGWVSLAELRAWIAHTQQRHIRDSVSAAWDTYDTDRDGRVGWEELRN
ATYGHYAPGEEFHDVEDAETYKKMLARDERRFRVADQDGDSMATREELTAFLHPEEFPHMRDIVIAETLE
DLDRNKDGYVQVEEYIADLYSAEPGEEEPAWVQTERQQFRDFRDLNKDGHLDGSEVGHWVLPPAQDQPLV
EANHLLHESDTDKDGRLSKAEILGNWNMFVGSQATNYGEDLTRHHDEL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_020650

ORF Size: 984 bp

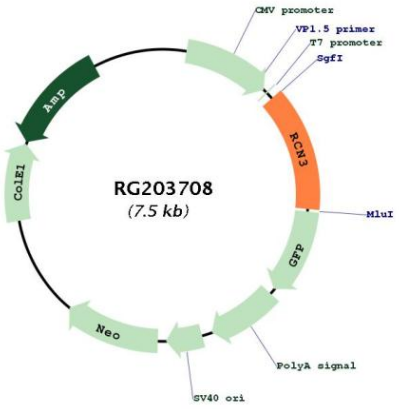
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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_020650.3
RefSeq Size:	1882 bp
RefSeq ORF:	987 bp
Locus ID:	57333
UniProt ID:	Q96D15
Cytogenetics:	19q13.33
Domains:	EFh
Gene Summary:	Probable molecular chaperone assisting protein biosynthesis and transport in the endoplasmic reticulum (PubMed:16433634, PubMed:28939891). Required for the proper biosynthesis and transport of pulmonary surfactant-associated protein A/SP-A, pulmonary surfactant-associated protein D/SP-D and the lipid transporter ABCA3 (By similarity). By regulating both the proper expression and the degradation through the endoplasmic reticulum-associated protein degradation pathway of these proteins plays a crucial role in pulmonary surfactant homeostasis (By similarity). Has an anti-fibrotic activity by negatively regulating the secretion of type I and type III collagens (PubMed:28939891). This calcium-binding protein also transiently associates with immature PCSK6 and regulates its secretion (PubMed:16433634).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG203708