

Product datasheet for RC223948

OIF (OGN) (NM_033014) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	OIF (OGN) (NM_033014) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	OIF
Synonyms:	OG; OIF; SLRR3A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC223948 representing NM_033014 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGACTCTGCAGTCTACACTTCTCCTGTTACTGCTTGTGCCTCTGATAAAGCCAGCACCACCAACCC
AGCAGGACTCACGCATTATCTATGATTATGGAACAGATAATTTTGAAGAATCCATATTTAGCCAAGATTA
TGAGGATAAATACCTGGATGGAAAAATTAAGGAAAAAGAACTGTGATAATACCCAATGAGAAAAGT
CTTCAATTACAAAAGATGAGGCAATAACACCATTACCTCCAAGAAAAGAAAATGATGAAATGCCACGT
GTCTGCTGTGTGTTTAAAGTGGCTCTGTATACTGTGAAGAAGTTGACATTGATGCTGTACCACCTT
ACCAAAGGAATCAGCCTATCTTTACGCACGATTCAACAAAATTAAGGCTGACTGCCAAAGATTTTGCA
GACATACCTAACTAAGAAGACTCGATTTTACAGGAAATTTGATAGAAGATATAGAAGATGGTACTTTTT
CAAACTTTCTCTGTTAGAAGAACTTCACTTGCTGAAAATCACTACTAAACTTCCAGTTCTTCTCCTCC
CAAGCTCACTTTATTTAATGCAAAATACAACAAAATCAAGAGTAGGGGAATCAAAGCAAATGCATTCAA
AACTGAATAACCTCACCTTCTCTACTTGACCATAATGCCCTGGAATCCGTGCCTCTTAATTTACCAG
AAAGTCTACGTGTAATTCATCTTCAGTTCAACAACATAGCTTCAATTACAGATGACACATTCTGCAAGGC
TAATGACACCAGTTACATCCGGGACCGCATTGAAGAGATACGCCCTGGAGGCAATCCAATCGTCTGGGA
AAGCATCCAAACAGTTTTATTTGCTTAAAAAGATTACCGATAGGGTCATACTTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC223948 representing NM_033014
 Red=Cloning site Green=Tags(s)

MKTLQSTLLLLLLVPLIKPAPPTQQDSRIIYDYGTDNFEEISFSQDYEDKYLDGKNIKEKETVVIIPNEKS
 LQLQKDEAITPLPPKKNDEMPTCLLCVCLSGSVYCEEVDIDAVPPLPKESAYLYARFNKIKKLTAKDFA
 DIPNLRRLDFTGNLIEDIEDGTFSKLSLLEELSLAENQLLKLPLVPPKLTLFNAKYNKIKSRGIKANAFK
 KLNNLTFLYLDHNALESVPLNLPESLRVIHLQFNNIASITDDTFCKANDTSYIRDRIEEIRLEGNPVILG
 KHPNSFICLKRPLIGSYF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6047_b02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_033014

ORF Size: 894 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: [NM_033014.3](#)

RefSeq Size: 2976 bp

RefSeq ORF: 897 bp

Locus ID: 4969

UniProt ID: [P20774](#)

Cytogenetics: 9q22.31

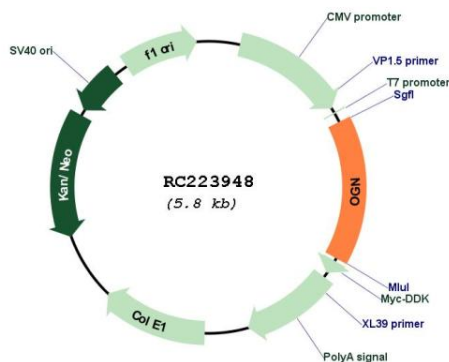
Domains: LRR, LRR_TYP

Protein Families: Secreted Protein

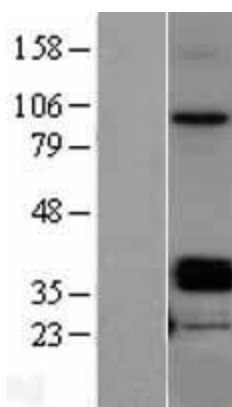
MW: 31.8 kDa

Gene Summary: This gene encodes a member of the small leucine-rich proteoglycan (SLRP) family of proteins. The encoded protein induces ectopic bone formation in conjunction with transforming growth factor beta and may regulate osteoblast differentiation. High expression of the encoded protein may be associated with elevated heart left ventricular mass. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2016]

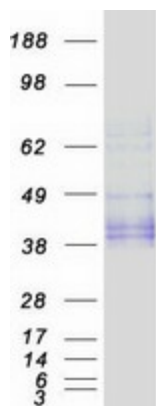
Product images:



Circular map for RC223948



Western blot validation of overexpression lysate (Cat# [LY403216]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223948 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified OGN protein (Cat# [TP323948]). The protein was produced from HEK293T cells transfected with OGN cDNA clone (Cat# RC223948) using MegaTran 2.0 (Cat# [TT210002]).