

Product datasheet for **RG238180**

CHRD2 (NM_001278473) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CHRD2 (NM_001278473) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CHRD2
Synonyms:	BNF1; CHL2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG238180 representing NM_001278473. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTGTAGTAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGTTTCCCGAGGTGAGGGTCTCTCTCTCTGCTGGACTCGCGCTGCTCTGGTCCCCCTGGACTCC
CACGCTCGAGCCCGCCAGACATGTTCTGCCTTTCCATGGGAAGAGATACTCCCCGGCGAGAGCTGG
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ACCATGTACCAACACGGAGAGATCTTCAGTGCCCATGAGCTGTTCCCTCCCGCTGCCAACCAAGTGT
GTCTCTGCAGCTGCACAGAGGGCCAGATCTACTGCGGCCTCACAACTGCCCGAACCAAGCTGCCCA
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AGACCAAGGGAGCAGGCAGCACAACCTGCAAGATCGTCTGAAGGAGAAACATAAGAAAGCCTGTGTG
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GAGGCACAGCACTTCCGACTGCTCGCTGGCCCCACGAAGGTCAGTGAACGCTTCTAGCCAGACC
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAAAC
```



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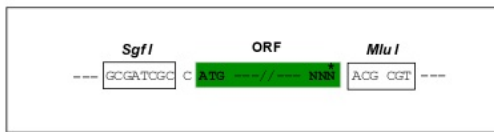
Protein Sequence: >Peptide sequence encoded by RG238180
 Blue=ORF Red=Cloning site Green=Tag(s)

MVPEVRVLSLLGLALLWFPLDSHARARPDMFCLFHGKRYSPGESWHPYLEPQGLMYCLRCTCSEGAHV
 SCYRLHCPPVHCPQPVTEPQQCCPKCPEPHTPSGLRAPPKSCQHNGTMYQHGEIFSAHELFP SRLPNQC
 VLCSCTEGQIYCLTTCPEPGCPAPLPLPDSCCQACKDEASEQSDEEDSVQSLHGVRHPQDPCSSDAGR
 KRGPPTAPTGLSAPLSFIPRHFRPKGAGSTTVKIVLKEKHKACVHGGKTYSHGEVWHPAFRAFGLPL
 CILCTCEDGRQDCQRTVCTEYPCRHEKVAGKCKICPEDKADPGHSEISSTRCPKAPGRVLVHTSVS
 PSPDNLRRFALEHEASDLVEIYLWKLVKGIFHLTQIKKVRKQDFQKEAQHFRLLAGPHEGHWNVFLAQT
 LELKVTASPKVTKT
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
 MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Kozac
Consensus

EcoRI BamHI KpnI RBS SgfI AscI

CTATAGGCGCGCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCCGCGCATCGCCGCGCCAGATCT

HindIII NheI RsrII MluI NotI XhoI GFP Tag

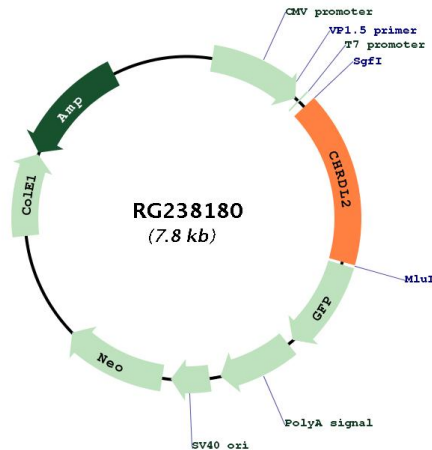
CAAGCTTAACTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC - - - - -

T R T R P L E M E S D - - -

PmeI FseI

- - - GAA GAA AGA GTT TAA ACGGCCGGCCGGAGCT

- - E E R V Stop

Plasmid Map:


ACCN: NM_001278473

ORF Size: 1287 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).

RefSeq: [NM_001278473.3](#)

RefSeq Size: 1868 bp

RefSeq ORF: 1290 bp

Locus ID: 25884

UniProt ID: [Q6WN34](#)

Cytogenetics: 11q13.4

Protein Families: Secreted Protein

MW: 47.9 kDa

Gene Summary:

This gene encodes a member of the chordin family of proteins. Chordin family members are secreted proteins that share a cysteine-rich pro-collagen repeat domain and associate with members of the transforming growth factor beta superfamily. In vitro assays demonstrate a direct interaction between the encoded protein and human activin A. This gene is expressed in many tissues including osteoblasts, where it is differentially expressed during differentiation. In addition, its expression is upregulated in human osteoarthritic joint cartilage, suggesting a role in adult cartilage regeneration. [provided by RefSeq, Jan 2015]