

## Product datasheet for **RG212223**

### Decorin (DCN) (NM\_133503) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Decorin (DCN) (NM_133503) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Decorin
Synonyms:	CSCD; DSPG2; PG40; PGII; PGS2; SLRR1B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG212223 representing NM_133503 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAAGGCCACTATCATCCTCTCTGCTTGCACAAGTTTCTGGGCTGGACCGTTTCAACAGAGAGGCT  
TATTTGACTTTATGCTAGAAGATGAGGCTTCTGGGATAGGCCCAGAAGTTCTGATGACCGCGACTTCGA  
GCCCTCCCTAGGCCAGTGTGCCCTTCCGCTGTCAATGCCATCTTCGAGTGGTCCAGTGTCTGATTTG  
GGTCTGGACAAAGTGCCAAAGGATCTTCCCCTGACACAACCTCTGCTAGACCTGCAAAACAACAAAATAA  
CCGAAATCAAAGATGGAGACTTTAAGAACCTGAAGAACCTTCACGCATTGATTCTTGCAACAATAAAAT  
TAGCAAAGTTAGTCTGGAGCATTACACCTTTGGTGAAGTTGGAACGACTTTATCTGTCCAAGAATCAG  
CTGAAGGAATTGCCAGAAAAATGCCAAAACCTTTCAGGAGCTGCGTGCCCATGAGAATGAGATACCA  
AAGTGCAGAAAAGTTACTTTCAATGGACTGAACCAGATGATTGTCTAGAAGTGGGCACCAATCCGCTGAA  
GAGCTCAGGAATTGAAAATGGGGCTTCCAGGGAATGAAGAAGCTCTCCTACATCCGATTGCTGATACC  
AATATCACCAGCATTCTCAAGTCTTCTCCTTCCCTACGGAATTACATCTTGATGGCAACAAAATCA  
GCAGAGTTGATGCAGCTAGCCTGAAAGGACTGAATAATTTGGCTAAGTTGGGATTGAGTTTCAACAGCAT  
CTCTGCTGTTGACAATGGCTCTCTGGCCAACACGCCTCATCTGAGGGAGCTTCACTTGGACAACAACAAG  
CTTACCAGAGTACCTGGTGGGCTGGCAGAGCATAAGTACATCCAGTTGTCTACCTTCATAACAACAATA  
TCTCTGTAGTTGGATCAAGTGACTTCTGCCACCTGGACACAACCAAAAAGGCTTCTTATTCCGGGTGT  
GAGTCTTTTCAGCAACCCGGTCCAGTACTGGGAGATACAGCCATCCACCTTCAGATGTGTCTACGTGCGC  
TCTGCCATTCACTCGGAACTATAAG

**ACCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG212223 representing NM\_133503  
 Red=Cloning site Green=Tags(s)

MKATIIILLLLAQVSWAGPFQQRGLDFMLEDEASGIGPEVPDDRDFEPSLGPVPCPFRQCCHLRVVQCSDL  
 GLDKVPKDLPPDTLLDLQNNKITEIKDGFKNLKNLHALILVNNKISKVSPGAF TPLVKLERLYLSKNQ  
 LKELPEKMPKTLQELRAHENEITKVRKVTFNGLNQMIIVIELGTNPLKSSGIENGAFQGMKKLSYIRIADT  
 NITSIPQGLPSSL TELHLDGNKISRVDAA SLKGLNNLAKLGLSFNSISAVDNGSLANTPHLRELHLDNNK  
 LTRVPGGLAEHKYIQVVYLHNNNISVVGSSDFCPPGHNTKKASYSYSGVSLFSNPVQYWEIQPSTFRVCYVVR  
 SAIQLGNYK

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_133503

**ORF Size:** 1077 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\\_133503.3](#)

**RefSeq Size:** 2151 bp

**RefSeq ORF:** 1080 bp

**Locus ID:** 1634

**UniProt ID:** [P07585](#)

**Cytogenetics:** 12q21.33

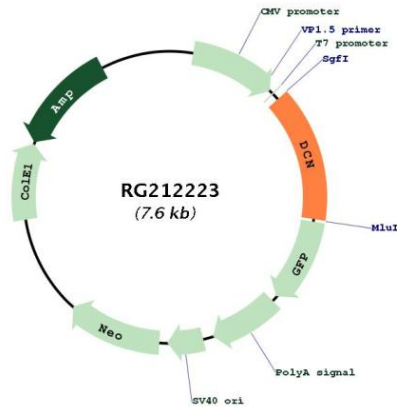
**Domains:** LRRNT, LRR, LRR\_TYP, LRR\_BAC, LRR\_PS

**Protein Families:** Druggable Genome, Secreted Protein

**Protein Pathways:** TGF-beta signaling pathway

**Gene Summary:** This gene encodes a member of the small leucine-rich proteoglycan family of proteins. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate the mature protein. This protein plays a role in collagen fibril assembly. Binding of this protein to multiple cell surface receptors mediates its role in tumor suppression, including a stimulatory effect on autophagy and inflammation and an inhibitory effect on angiogenesis and tumorigenesis. This gene and the related gene biglycan are thought to be the result of a gene duplication. Mutations in this gene are associated with congenital stromal corneal dystrophy in human patients. [provided by RefSeq, Nov 2015]

Product images:



Circular map for RG212223