

## Product datasheet for **MG205682**

### Bgn (NM\_007542) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Bgn (NM_007542) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Bgn
Synonyms:	BG; DSPG1; PG-S1; PGI; S; SLRR1A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG205682 representing NM_007542 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTGTCCCTGTGGCTACTCACCTTGCTGCTGGCCCTGAGCCAGGCCTTGCCCTTTGAGCAGAAGGGTT  
TCTGGGACTTCACCTTGATGATGGGCTGCTCATGATGAATGATGAGGAGGCTTCAGGTTTCAGACACCAC  
TTCAGGTGTCCCCGACCTGGACTCTGTACACCTACCTTCAGTGCCATGTGTCCTTCGGTTGCCACTGC  
CACCTGCGGGTTGTTCACTGCTGACTTGGGTCTGAAGACTGTGCCAAGGAGATCTCACCTGACACCA  
CACTGCTAGACCTGCAGAACAAATGACATTTCTGAGCTTCGAAGGATGACTTCAAAGGCCTCCAGCACCT  
CTACGCCCTGGTCTTGGTAAACAATAAGATCTCCAAGATCCATGAGAAGGCCTTTAGCCCTCTGCGGAAG  
CTGCAAAAACCTCTACATCTCCAAGAACCACCTGGTGGAGATTCCTCCCAACCTGCCAGCTCCCTGGTAG  
AACTACGAATCCATGACAACCGTATCCGCAAAGTGCCCAAGGGCGTGTTCAAGCGGGCTCCGGAACATGAA  
CTGCATTGAGATGGGCGGAATCCCCTGGAGAACAGTGGCTTTGAACCAGGAGCCTTTGATGGCCTGAAG  
CTCAATTACCTGCGCATCTCAGAGGCCAAGCTCACTGGCATCCCCAAAGATCTCCCTGAGACCCTGAACG  
AACTTCACCTGGACCACAACAAAATCCAGGCTATTGAGTTGGAGGACCTACTTCGATACTCCAAGCTGTA  
CAGGTTGGGCTTAGGTCACAATCAGATTCGATGATTGAGAATGGGAGCCTGAGTTTTCTGCCTACCCTG  
AGGGAACCTTCACTTGGACAACAACAGCTGTCCGGGTGCTGTCGCTCCAGATCTCAAGCTCCTCC  
AGGTTGTCTATCTGCACTCCAACAACATCACCAAGGTGGGCATCAATGACTTCTGTCTATGGGCTTCGG  
AGTCAAGAGGGCCTACTATAATGGCATAGCCTCTTCAACAACCTGTGCCCTACTGGGAAGTGCAGCCT  
GCCACCTCCGCTGCGTTACTGACCGCCTGGCCATCCAATTTGAAATTATAAGAAG

**ACCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >MG205682 representing NM\_007542  
 Red=Cloning site Green=Tags(s)

MCPLWLLTLLLALSQALPFEQKGFWDFTLDDGLLMMNDEEASGSDTTSGVPDLDSVTPTFSAMCPFSGHC  
 HLRVVQCSDLGLKTVPKIISPDTLLDLQNDISELRKDDFKGLQHLVALVNNKISKIHEKAFSPLRK  
 LQKLYISKNHLEVEIPPNLPSSELVELRIHDNRIRKVPKGVFSGLRNMNCIEMGGNPLENSGFEPGAFDGLK  
 LNYLRISEAKLTGIPKDLPETLNLHLHDHNKIQAIELEDLLRYSKLYRLGLGHNQIRMIENGSLSFLPTL  
 RELHLDNNKLSRVPAGLPDLKLLQVVYLHSNNITKVGINDFCPMGFVKRAYYNGISLFNNPVPYWEVQP  
 ATRFRVTDRLAIQFGNYKK

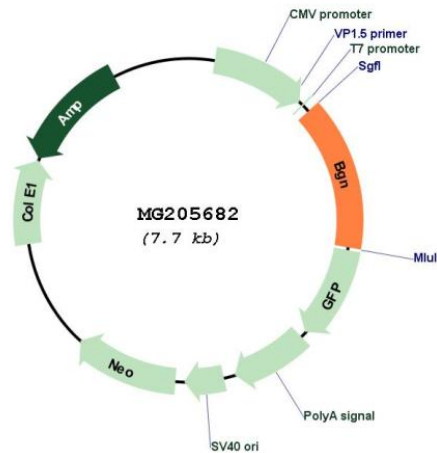
TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_007542

<b>ORF Size:</b>	1107 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_007542.5</a>
<b>RefSeq Size:</b>	2390 bp
<b>RefSeq ORF:</b>	1110 bp
<b>Locus ID:</b>	12111
<b>UniProt ID:</b>	<a href="#">P28653</a>
<b>Cytogenetics:</b>	X 37.33 cM
<b>Gene Summary:</b>	This gene encodes a small, leucine-rich repeat proteoglycan that plays important roles in bone mineralization and connective tissue metabolism. The encoded preproprotein undergoes post-translational processing during which chondroitin sulfate or dermatan sulfate chains are attached before incorporation into the extracellular matrix. Mice lacking the encoded protein exhibit reduced growth rate and acquire diminished bone mass progressively with age. [provided by RefSeq, Oct 2015]