

## OriGene Technologies, Inc.

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## Product datasheet for SC123968

## Gremlin 1 (GREM1) (NM\_013372) Human Untagged Clone

## **Product data:**

Product Type:	Expression Plasmids
Product Name:	Gremlin 1 (GREM1) (NM_013372) Human Untagged Clone
Tag:	Tag Free
Symbol:	Gremlin 1
Synonyms:	C15DUPq; CKTSF1B1; CRAC1; CRCS4; DAND2; DRM; DUP15q; GREMLIN; HMPS; HMPS1; IHG-2; MPSH; PIG2
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	<pre>&gt;OriGene ORF within SC123968 sequence for NM_013372 edited (data generated by NextGen Sequencing) ATGAGCCGCACAGCCTACACGGTGGGAGCCCTGCTTCTCCTCTTGGGGACCCTGCTGCCG GCTGCTGAAGGGAAAAAGAAAGGGTCCCAAGGTGCCATCCCCCGCCAGACAAGGCCCAG CACAATGACTCAGAGCAGACTCAGTCGCCCCAGCAGCCTGGCTCCAGGAACCGGGGGGGG</pre>

Clone variation with respect to NM\_013372.6



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5' Read Nucleotide Sequence:	<pre>&gt;OriGene 5' read for NM_013372 unedited GTACAATGTGAATACCACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGGCGACCCAG TGCACGGCCGCCGCGCTCACTCTCGGTTCCGCTGACCCCGCGCGAGGCCCCGGCGGCGGCGGCGCGCACTCCGGTCGACTCCGGCTGAAAGCGCAGGCCCGGAGGACCCGGCGCGCACTG GCCGCGGCCGCACTCAGCGCCACGCGTCGAAAGCGCAGGCCCTGCTTCTCCTCTTGGGGACCCTGC TGCCGGCTGCTGAAGGGAAAAAGAAAGGGTCCCAAGGTGCCATCCCCCCGCCAGACAAGG CCCAGCACAATGACTCAGAGCAGACTCAGTCGCCCCAGCAGCCTGGCTCCAGGAACCGGG GGCGGGGCCAAGGGCGGGCACTGCCATGCCCGGGGAGGAGGTGCTGGAGTCCAGCCAAG AGGCCCTGCATGTGACGGAGGCGCAAATACCTGAAGCGAGGAGGTGCTGGAGTCCAGCCAG</pre>
3' Read Nucleotide Sequence:	<pre>&gt;OriGene 3' read for NM_013372 unedited GCCTGCAGTGGCAACTTCCGGGCCAGGAGAGGCACTGGGGAGGGGTCACAGGGATGCCAC CCGGGATCTGTTCAGGAAACAGCTATGACCGCGGCCGCAATCTAGAGTCGAGTTTTTTG GTTTTTTTTTT</pre>
<b>Restriction Sites:</b>	Please inquire
ACCN:	NM_013372
Insert Size:	3500 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol> <li>Centrifuge at 5,000xg for 5min.</li> <li>Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>Close the tube and incubate for 10 minutes at room temperature.</li> <li>Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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>

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	Gremlin 1 (GREM1) (NM_013372) Human Untagged Clone – SC123968
RefSeq:	<u>NM 013372.5, NP 037504.1</u>
RefSeq Size:	4175 bp
RefSeq ORF:	555 bp
Locus ID:	26585
UniProt ID:	<u>O60565</u>
Cytogenetics:	15q13.3
Protein Families	ES Cell Differentiation/IPS, Secreted Protein
Gene Summary:	This gene encodes a member of the BMP (bone morphogenic protein) antagonist family. Like BMPs, BMP antagonists contain cystine knots and typically form homo- and heterodimers. The CAN (cerberus and dan) subfamily of BMP antagonists, to which this gene belongs, is characterized by a C-terminal cystine knot with an eight-membered ring. The antagonistic effect of the secreted glycosylated protein encoded by this gene is likely due to its direct binding to BMP proteins. As an antagonist of BMP, this gene may play a role in regulating organogenesis, body patterning, and tissue differentiation. In mouse, this protein has been shown to relay the sonic hedgehog (SHH) signal from the polarizing region to the apical ectodermal ridge during limb bud outgrowth. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2010] Transcript Variant: This variant (1) is the longest transcript and encodes the longest isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.

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