

Product datasheet for **SC105874**

GNS (BC017742) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GNS (BC017742) Human Untagged Clone
Tag:	Tag Free
Symbol:	GNS
Synonyms:	G6S
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for BC017742, the custom clone sequence may differ by one or more nucleotides

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AGAGCAGTAAGCTTGTGATAAAGGCCAATTCAGGTAGCTCTTGAAGGTGATAGCCATCTACTTTCCAGT
GGCTGCCAACACAGGGAGTGCCAGTTAACACTGGAAGGATTAAGGCAAGTCCCTTCTCTTGAGACTCC
CCTCTGAGATCTGAAAAATGAAGTGGCTTAGAACATCAGCAGTGAAGAAGTCCCAAGAGTTGGTGAAGG
TTGTCTCTTCCGAGGGCCTTCTGAAGACAGGGCTTGAACAGACAAGTGAAGGCTGTACCAGGGATA
AAGGAAAGAAGTGCCTGTCCAGCAGGGAGCTTGAATTTAAGTTCCATGTATGAAGTCATTGGCTCTATCT
GCATTTTTCTGTCTTCTCTTCAATTTGTTTTAAGGTGGAAAAATTTCTTACAGTTGATGCAAAGTATCAA
CTACTTTACCCTACCTTCTCCCTTTTAGATGGGTTCTTCTGAGTTTTGGAGTCTTGTATGATTATCAG
TATTCCTGTCAAAATCAAATCTATTCAGGTTTCTTCACTGTTGAGAACACCTAAATGTTTTATTTTT
GAGAAGTGGGACAGAGTCTCACTATGACCCAGGCTGGAGTGAATGGCATGATCTCAGTCACTGCA
ACCTTCGCCTCCTGGGTTCAAGCGATTCTCCTGCCTCCGCCTCCTGAGTAGCTGGGATTATAGGCACGCA
CCACCACGCCAGCTAATTTTTGTATTTTAGTAGAGACAGAGTTTACCATGTTGGCCAGGCTGGTCT
TGAACCTCTGACCTGTGATCCACCCACCTCGGCCTCCCAGAGTCTGGGATTACAGGCATGAGCCACCA
CGCTTGGCTAAGAACACCTAAATTTTTATGTTTCTTGGCTCAAAAACAGTTCATTTCTAATGTTGTCC
TCACAAGAAGGCTAATGGTGGTGAGACAGCGGGAGGAGGAAGAGCTGTGTTTTGTAACCTGTTCAAC
TCAGGCAATAAGCGATTTAGCTTTATTTAAAGCTTCTGTCCAGCTTTAAGCAGTTTGAAGACATGGC
TGAAAGTAGCTTTTCTATCAGAATTGCAGATAGTCATGTTGGGCTAACAGTCAATTGGATATATTCCTTT
ACCTCACATGACCCAGCAACTGTGGTGGTATCTAGAGGTGAAACAGGCAAGTGAATGGACACCTCTGC
TGTGAATGTTTTAGAGAAGGAAATCAAAAAATGTTGAACTGAAAGCACTGTTGAATATGGGTATCGGC
TTTTTTTTCACTTTGACTTTAACATTATCAGTCAACTCCACATTAATGAAAGTTGACCATAGTTATT
TCCAAATAAAAAGAAACCAACTTTACCAGGTCTTGGACTGTGATGTCAATTATTAGTTTTATGCTTGTG
TTCTGAGCAGAACTCATAAGAGTGACATAGTCAGCTGCTGACGCGACCTCAGCCACGCCACTCTTACTC
AGTTCAGTGGGTGTGCTTGCCTGGTAGGATGTGGTGCAGCCCTCTCTACGCTCTTCTATTTTTGGTATAT
TTCCTATCTAACCTTCAAATAGCTTCCAATTTTTTTTTCTTGGACTGGCTTCATTCTGAATTTGTGCTA
AAATAATCTTTCATAAAGAGACCTCAGTTTATAGCGTAACAGACTACACAATGCACTGATGTTTTCATAA
TGTTAAGGGACCCACTGCAAGAAGCTTGCTGCCTCCTTTAATTGTATTCATTTAGATTTTGATTTTCC
ATGTTAAGAAGGTGAGGTCCATGTTGGTGCCCTCAGAGTAGAGAACCATGTAACATTAGGAATGAACA
GAGGCCTTAGGAATGAATAGAGAGTTTGCCTTATACAATTCCTGTTACAAGCTCTCCCTCTCATGCAA
AGTAGGGAACACCTTTTGAAGCATCTTTGAATTTGACAAATGGTGTCTGTTGCAAACTTTTTTTTTGAGA
TGAAGTCTCGCGTTGTACCCGGGCTGGAGTGCAGTGGCGTGATCTCGGCTCACTGCAACTTCCACCTC
CTGGGTTCCAGCAGTTCTCCTGCCTCAGCTCCCAAGTAGCTGAGATTACAGGCGCTGCCACCCACCT
GGCTGATTTTTGTAATTTAGTAGAGACGGGTTTACCATGTTGGCCAGGCTGATTAACCTGACCTC
AGGTGATCCACCTTCTCGGCCTCCCAAGTGTGGGATTACGGGTGTGAGCCACCGTGCCCGGCCTGCA
AACACATTTAATTGACAACACTAGGGCTGTTGTACAAAATAGTAATGATAGCCATGGAAGTTTTACCTT
ATTCTGTGAGAAGTGTCTTAACTTATTAAGTGTCTAACTAAGGTTTAGTGCTTTTTTAAAGGAAAGT
TGTCACAGGATTCATCTAAAGAAAGCAAAAGTTAATCAACTGATCCACCAATGGAATTAGATGGGTAG
AGTTGGGTTCTTGAGTTTTACCACCACTTAGTCCCACTGAATTTGAACTTCTGTGTTTGCATCCTC
TGTTCTATTCTGCCCTTGTCTGTGTCATCTCAGTCATTTGACTTAGAAAGTGCCCTTCAAAGGACCC
TGTTCACTGCTGCACTTTTCAATGAATTAATTTATTTCTGTTCTAAAAA
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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for BC017742 unedited</p> <pre>GGATTTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGCTAGGCTGGT GCTGCACTGAAATAGAGCAGTAAGCTTGTGATAAAGGCCAATTCAGGTAGCTCTTGAAG GTGATAGCCATCTACTTCCAGTGGCTGCCAACACAGGGAGTGCCAGTTAACTGGAA GGATTAAGGCAAGGTCCCTTCTCTTGAGACTCCCCTCTGAGATCTGAAAAATGAAGTGGC TTAGGAACATCAGCAGTGAAGAACTGCCAAGAGTTGGTGAAGGTTGTCTTCCGAGGGC CTTCTGAAGACAGGGCTTTGAACAGACAAGTGAAGGGCTGTACCAGGGATAAAGGAAA GAAGTGCCTGTCCAGCAGGGAGCTTGAATTTAAGTTCCATGTATGAAGCATTGGCTCTA TCTGCATTTTTCTGCATTCTCTTCATTTGTTTTAAGGTGGAAAAATTTCTTACAGTTGA TGCAAAGTATCAACTACTTTACCCTACCTTCTCCCCTTTTAGATGGGTTCTTCTGAGTT TTGGAGTCTTGTATGATTATCAGTATCCCTGTCAAAATCAAATCTATTCAGGTTTCTT CACTGTTGAGAACACCTAAATGTTTTATTTTTGAGAAGTGGGGACAGAGTCTCACTATG TCACCCAGGCTGGAGTGAATGGCATGATCTCAGCTCACTGCAACCTTCGCCTCTGGGT TCAAGCGATTCTCTGCCTCCGCTCCTGAGTAGCTGGGATTATAGGCACACACCACCAC GCCAGCTAATTTTTGTATTTTTAGTAGAGACAGAGNTTACCATTNGTGCCAGNCTGG TCTTGAACCTCCTGACN</pre>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for BC017742 unedited</p> <pre>ATTTACTTGNACCGCGCCCGCTATCTAGGATCGAGTTTTTTCTTTTTTTTTTAGACAG AAATATTTTATTCTTGAAAATGCAGCAGTGAACAGGGTCTTTTTGAAGGGCACTTTCTAA GTCAAATGACTGAGATGACACAGAGCAAGGGCAGAATAGGAACAGAGGATGCAAACACAG GAAGTTACAAAATTCAGTGGAACTAAGTGGTGGTAAAACCAAGAACCCAACTCTACCC ATCTAATTCATTGGTGGATCAGTTGAATTAACTTTTGCTTTCTTTAGGATGAATCCTGG GACAACTTTCCTTTAAAAAAGCACTAAACCTTAGTTTAGACACTTAATAAGTTTAAAGAAC ACTTCTCAGAAATAAGGTAAAACCTTCCATGGCTATCATTACTATTTGTACAACAGCCC TAGTGTGTCAATTAATGTTTGCAGGCCGGGCACGGTGGCTCACACCCGTAATCCC AGCACTTTGGGAGGCCGAGAAAGGTGGATCACCTGAGGTGAGGAGTTAATCAGCCTGGCC AACATGGTGAAACCCCGTCTCTACTAAAATTACAAAAATCAGCCAGGTGGGGTGGCAGGC GCCTGTAATCTCAGTACTTGGGAGGCTGAGGCAGGAGAACTGCTGGAACCCAGGAGGTG GAAGTTGCAGTGAGCCGAGATCACGCCACTGCACTCCAGCCCGGGTGACAACCCGAGAG TTCATCTCAAAAAAAAAGTGTGTTGCAACAGCACCATTTGTCAAATTCAAAGATGCTCAAA AGGTGTTCCCTACTTTGCATGAGAGGGAGCTTTGTAACAGGGAATTGTATAAGGCAAA CTCTCTATTCTAAGGCCTCTNGTCATTCTATGTTTACATGGNTCTCTACTCTGA AGGGCACCATGGACCTCACCTTCTAC</pre>
Restriction Sites:	NotI-NotI
ACCN:	BC017742
Insert Size:	2750 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 style="list-style-type: none">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:	BC017742.1
RefSeq Size:	2651 bp
RefSeq ORF:	2651 bp
Locus ID:	2799
Cytogenetics:	12q14.3
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Glycosaminoglycan degradation, Lysosome, Metabolic pathways
Gene Summary:	The product of this gene is a lysosomal enzyme found in all cells. It is involved in the catabolism of heparin, heparan sulphate, and keratan sulphate. Deficiency of this enzyme results in the accumulation of undegraded substrate and the lysosomal storage disorder mucopolysaccharidosis type IIID (Sanfilippo D syndrome). Mucopolysaccharidosis type IIID is the least common of the four subtypes of Sanfilippo syndrome. [provided by RefSeq, Jul 2008]