

## Product datasheet for **SC107605**

### GNAL (NM\_182978) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GNAL (NM_182978) Human Untagged Clone
Tag:	Tag Free
Symbol:	GNAL
Synonyms:	DYT25
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_182978, the custom clone sequence may differ by one or more nucleotides

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ATGGGTCTGTGCTACAGTCTGCGCCGCTGCTTTTCGGGGGCCAGGGGACGACCCCTGCGCGCCCTCGG
AGCCGCCGGTGGAGGACGCGCAGCCCGCCCGGCCCTGGCCCCAGTCCGGGCGGCCGAAGGGA
CACGGCCCGACCTGCTCCCTCGGGCGGCGAAGGGAGCCCGCATGCGCTCGGCCAAAGCAGACAAG
CCGAAGGAGAAGCGGCAGCGCACCGAGCAGCTGAGTGCCGAGGAGCGGAGGGCGCAAGGAGCGCGAGG
CGGTCAAGGAGGCGAGGAAAGTGAGCCGGGCGATCGACCGCATGCTGCGCGACCAGAAGCGCGACCTGCA
GCAGACGCACCGGCTCCTGCTGCTCGGGGCTGGTGAAGTCTGGGAAAAGCACTATCGTCAAACAGATGAGG
ATCCTGCACGTCAATGGGTTTAATCCCAGGAAAAGAAAACAGAAAATTCTGGACATCCGGAAAAATGTTA
AAGATGCTATCGTGACAATTGTTTCAGCAATGAGTACTATAATACCTCCAGTTCCGCTGGCCAACCTGA
AAACCAATTTTCGATCAGACTACATCAAGAGCATAGCCCCTATCACTGACTTTGAATATCCAGGAATTC
TTTGACCATGTGAAAAAATTTGGGACGATGAAGGCGTGAAGGCATGCTTTGAGAGATCCAACGAATACC
AGCTGATTGACTGTGCACAATACTTCTGGAAAGAATCGACAGCGTCAGCTTGGTTGACTACACCCAC
AGACCAGGACCTCCTCAGATGCAGAGTTCTGACATCTGGGATTTTGGAGACGATTCCAAGTGGACAAA
GTAAACTCCACATGTTTGATGTTGGTGGCCAGAGGGATGAGAGGAGAAAATGGATCCAGTGCTTTAACG
ATGTCACAGCTATCATTTACGTCGCAGCCTGCAGTAGCTACAACATGGTGATTGAGAAGATAACAACAC
CAACAGGCTGAGAGAGTCCCTGGATCTTTTGAAGCATCTGGAACAACAGGTGGTTACGGACATTTCT
ATCATCTTGTCTTGAACAAACAAGATATGCTGGCAGAAAAAGTCTTGGCAGGAAATCAAAAATTGAAG
ACTATTTCCAGAAATATGCAAAATATACTGTTCTGAAGACGCAACACCAGATGCAGGAGAAGATCCCAA
AGTTACAAGAGCCAAGTTCTTTATCCGGGACCTGTTTTGAGGATCAGCACGGCCACCGGTGACGGCAAA
CATTACTGCTACCCGCACTTCACCTGCGCCGTGGACACAGAGAACATCCGCAGGGTGTTCACAGACTGCC
GCGACATCATCCAGCGGATGCACCTCAAGCAGTATGAGCTCTTGTGA
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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for NM_182978 unedited TACTATAGGGCGGCCGGAATTCGCACGAGGGGGCAGTGAGGGGCTGTGGCCCTCGGCC CGGCCTGCCGCACCCCCTTCCCGCAGCTGGCGGCCGGCAGCGCGAACAGGGTCCGGGTG CAGCCCCCTCCCGCCCTCCGCTGAGGGCCGGCCTGAACTGGGCGCGGGAACAGGCCG CCCTCGGCGCCAGCCTGCCCTAGTCCCGCGCCGCCCGCCCGTGTGCCGCGCCACATG GGTCTGTGCTACAGTCTGCGGCCGTGCTTTTCGGGGGCCAGGGGACGACCCCTGCGCG GCCTCGGAGCCGCCGGTGGAGGACGCGCAGCCCGCCCGGCCCGCCCTGGCCCCAGTC CGGGCGGCCGAAGGGACACGGCCCGGACCTGCTCCCTCGGNGCGCGAAGGGAGCCCG GCATGCGCTCGGCCAAAGCAGACAAGCCGAAGGAGAAGCGGCAGCGCACCGAGCANCTG AGTGCCGAGGAGCGGAGGCGGCCAANGAGCGCGAGGCGGTCAAGGAGGCGAGGAAAGTG AGCCGNGCATCGACCGCATGCTGCGCGACCAGAAGCGCGACCTGCAGCAGACGCCCGG CTCCTGCTGCTCGGGCTGGGTGAGTCTGGAAAAGCACTATCGTCAACAGATGAAGATC CTGCACGTCAATGGGTTTTATCCCGAGGAAAAGAACANGAAATTCTGGACATCCGNAAA ATGGTAAGATGCTATCGTACAANTGGTTCAGCNATGAGTACTATTATACCTCCCAGTTN CCGCTGGCCACCCTGAAACCAATTNCGATCAGACTACTCAAGAGCATAGCCCCATCACT GACTTTGGAATCCAGGAATCCTTGGACTGTGAAAAAATTGGACAAAAAAGCCGTAA GGCTGCTTTTNAAAAACCAAAACACCTGATTGACTGGCCAAACTTCTGGAAGATAA AAGGCACCTTGGGTGCTAACCCCAACAGACCTNNNGGGAAGAGTTGTTA
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_182978
<b>Insert Size:</b>	4300 bp
<b>OTI Disclaimer:</b>	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).
<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_182978.1</a> , <a href="#">NP_892023.1</a>
<b>RefSeq Size:</b>	2479 bp
<b>RefSeq ORF:</b>	1377 bp
<b>Locus ID:</b>	2774
<b>UniProt ID:</b>	<a href="#">P38405</a>
<b>Cytogenetics:</b>	18p11.21
<b>Protein Families:</b>	Druggable Genome

**Protein Pathways:** Calcium signaling pathway, Olfactory transduction

**Gene Summary:** This gene encodes a stimulatory G protein alpha subunit which mediates odorant signaling in the olfactory epithelium. This protein couples dopamine type 1 receptors and adenosine A2A receptors and is widely expressed in the central nervous system. Mutations in this gene have been associated with dystonia 25 and this gene is located in a susceptibility region for bipolar disorder and schizophrenia. Alternative splicing results in multiple transcript variants.

[provided by RefSeq, Dec 2013]

Transcript Variant: This variant (1) represents 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.