

## Product datasheet for **SC127492**

### GNPTAB (AK056137) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GNPTAB (AK056137) Human Untagged Clone
Tag:	Tag Free
Symbol:	GNPTAB
Synonyms:	GNPTA; ICD
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >NCBI ORF sequence for AK056137, the custom clone sequence may differ by one or more nucleotides

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AGACCCCGCGGCGGCGGCGGCGGCTCAGGCTCCTCGGGCGTGGCGTGGCGGTGAAGGGTGATGCTGT
TCAAGCTCCTGCAGAGACAGACCTATACCTGCCTGTCCACAGGTATGGGCTCTACGTGTGCTTCTTGGG
CGTCGTTGTACCATCGTCTCCGCCTTCCAGTTCCGAGAGGTTGTTCTGGAATGGAGCCGAGATCAATAC
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CAACAGATAAAGAAGTCCCTGGATTAGTGCTAATGCAAGATTTGGCTTTCCTGAGTGGATTTCCACCAAC
ATTC AAGGAAACAAATCAACTAAAAACAAAATTGCCAGAAAATCTTCCCTCAAAGTCAAACCTGTTGCAG
TTGATTCAGAGGCCAGTGTAGCGCTTCTAAAACCTGAATAACCCCAAGGATTTTCAAGAATTGAATAAGC
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CAGAAGTTTTATTTACCTAAATGATGATGCTGTTTGGGAAGATGCTGGCCAGATGATTTTTACAGT
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TGCCTTATTTAGCTTTGCAGAAGTAGCCAAAAGAGGAGTTGAAGGTGCCTATAGTGACAATCCAATAAT
TCGACATGCTTCTATTGCCAACAAAGTGGAAAACCATCCACCTCATAATGCACAGTGAATGAATGCCACC
ACAATACATTTTAAATCTCACGTTTCAAATACAAACGATGAAGAGTTCAAATGCAGATAACAGTGGAGG
TGGACACAAGGGAGGGACCAAACTGAATTCTACAGCCAGAAAGGTTACGAAAATTTAGTTAGTCCCAT
AACACTTCTTCCAGAGGCGGAAATCCTTTTTGAGGATATCCCAAAGAAAACGCTTCCCGAAGTTAAG
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TTCCAAAAGACGCCAGTTGAGTCTCAATACCTTGGATTTGCAACTGGAACATGGAGACATCACTTTGAA
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AGTGAATGGTCATGACCAGGGTCAGAATCCACCCTGGACTTGGAGACCACAGCAAGATTTAGAGTGGAA
ACTCACACCCAAAAAACCATAGGCGGAAATGTGACAAAAGAAAAGCCCCATCTCTGATTGTTCCACTGG
AAAGCCAGATGAC
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<b>5' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 5' read for AK056137 unedited</p> <pre>CTCACTATAGGGCGGCCGGAATTCGGCACGAGGGCGTGGCGGTGAAGGGGTGATGCTGT TCAAGCTCCTGCAGACAGACCTATACCTGCCTGTCCCACAGGTATGGGCTCTACGTGT GCTTCTTGGGCGTCGTTGTACCATCGTCTCCGCCTTCCAGTTCGGAGAGGTGGTTCTGG AATGGAGCCGAGATCAATACCATGTTTTGTTGATTCTATAGAGACAATATTGCTGGAA AGTCCTTTCAGAATCGGCTTTGTCTGCCCATGCCGATTGACGTTGTTTACACCTGGGTGA ATGGCACAGACCTTGAACACTGAAGGAACTACAGCAGGTGAGAGAACAGATGGAGGAGG AGCAGAAAAGCAATGAGAGAAATCCTTGGGAAAAACACAACGGAACCTACTAAGAAGAGTG AGAAGCAGTTAGAGTGTTTGCTAACACACTGCATTAAGGTGCCAATGCTTGCCTGGACC CAGCCCTGCCAGCAACATCACCTGAAGGACCTGCCATCTCTNTATCCTTCTTTTCATT CTGCCAGTGACATTNTCAATGTTGCAAAACCAAAAAACCCTTCTACCAATGTCTCAGTTG TTGNTTTTGACAGTACTAAGGGATGTGAAGATGCCCACTCTGNACTGCTTTAAGGAATAG CAGACAGACAGTATGGAGGGGCTACTTTGACACAGATAAAGAGTCCCTGGATTAGTGCTA AATGCAGATTTGGCTTCTGAGTGGATTTCCACCACATTCAGGAAACAAATTCACATAAA ACAAAATTGCCAGAAATCTTTCTAAGTCAACTGNTGCAANTGATTCAAAGCCANTGT ANCCTCTAAACTGNATACCCCAAGGATTTTCAGAAAATGATAGCAACCTAGAGACATGA CCCTTTGTGAAANGACTGACCATAGTCTGCATTTATTATGGNATCTGACGCATCAGCCAT CTAGCAGATGAGACTCTCTGCCATCGTTTAGATACAG</pre>
<b>3' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 3' read for AK056137 unedited</p> <pre>TTTAGCTTGNACCGCGGCCGAATCTAGGATCGAGTTTTTTTTTTTTTTTTTTTGTGCATC TGGCTTCCAGTGGAACAATCAGAAATGGGGGCTTTTCTTTTGTACATTTCCGCCTATG GTTTTTGGGTGTGAGTTTCCACTCTAAATCTTGTGTGGTCTCCAAGTCCAGGGGTGGA TTCTGACCCTGGTCATGACCATTCACTTTTACACTCACTGCAGGAAAAGTCAACCTCTGC AATCTTTCAGACACTCCTAAGCTGTTTGGCAAGATGCTTTTATGAACCTGTTTTTCTGT GGAGCCACCAACTGTCATTTGTTTCATCTGTTATTATAGCTTGATTTTTATTTTAGCA TGCTGTGAGTTCATCAGAAATGATCTCAGCAAGGCTGACTTGGACAAATGTATCCTTTC AAAGTGATGTCTCCATGTTCCAGTTGCAAAATCCAAGGATTGAGACTCAACTGGGCGTCT TTTGGAAAGGAGTAAAATATTTACCAGGGGAATTTTCCACTCTTCTGGGCTCTCCTTGT GAGTTAACATCATGTCTCTTAAACTTCGGGAAGCGTTTTTCTTTGGGAATATCCTCAAAA AGGATTTCCGCCTCTGGAAGAAGTGTTATGGGACTAACTAAATTTTCGTAACCTTCTGG GCCGTAGAAATTCAGTTTTGGTCCCTCCCTTGTGTCCACCTCCACTGTTATCTGCATTTTG AACTCTTCATCGCTTGTATTTTGAACGTGAGATAAAATGTTTTGTGGCGGCATTCAATC CACTGTGCATTATGAGGTGGATGGCTTTCCACCTTGTGGCATAACAACATGTCCAATTA TTGGATTGTCATTTGGCCCCCTCACTCCTCTTTGGCTACTCTGCAAACTGAAAAAAGC GGCATCCCTTTTAAAAATATAGTCTGGCTCGAAN</pre>
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	AK056137
<b>Insert Size:</b>	2760 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="#">AK056137.1</a> , <a href="#">BAB71102.1</a>
<b>RefSeq Size:</b>	2603 bp
<b>RefSeq ORF:</b>	2603 bp
<b>Locus ID:</b>	79158
<b>Cytogenetics:</b>	12q23.2
<b>Domains:</b>	NL
<b>Protein Families:</b>	Transmembrane
<b>Protein Pathways:</b>	Lysosome
<b>Gene Summary:</b>	<p>This gene encodes two of three subunit types of the membrane-bound enzyme N-acetylglucosamine-1-phosphotransferase, a heterohexameric complex composed of two alpha, two beta, and two gamma subunits. The encoded protein is proteolytically cleaved at the Lys928-Asp929 bond to yield mature alpha and beta polypeptides while the gamma subunits are the product of a distinct gene (GeneID 84572). In the Golgi apparatus, the heterohexameric complex catalyzes the first step in the synthesis of mannose 6-phosphate recognition markers on certain oligosaccharides of newly synthesized lysosomal enzymes. These recognition markers are essential for appropriate trafficking of lysosomal enzymes. Mutations in this gene have been associated with both mucopolipidosis II and mucopolipidosis IIIA. [provided by RefSeq, May 2010]</p>