

Product datasheet for **SC109567**

PIGA (NM_002641) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PIGA (NM_002641) Human Untagged Clone
Tag:	Tag Free
Symbol:	PIGA
Synonyms:	GPI3; MCAHS2; PIG-A; PNH1
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None
Fully Sequenced ORF:	>NCBI ORF sequence for NM_002641, the custom clone sequence may differ by one or more nucleotides

```
ATGGCCTGTAGAGGAGGAGCTGGGAATGGCCACCGTGCCTCAGCTACACTCTCTCGGGTTAGCCCTGGAA
GTCTTTACACATGTAGAACCCGTACCCATAATATATGCATGGTATCTGACTTTTTCTACCCAAATATGGG
AGGCGTGGAAAGCCACATTTACCAGCTCTCTCAGTGCCTGATTGAAAGAGGGCATAAGGTTATAATTGTC
ACCCATGCTTATGAAAATCGAAAAGGCATCCGTTACCTCACCAGTGGCCCAAAGTCTATTACTTGCCTC
TGAAAGTCATGTACAACAGTCTACAGCCACGACCCTCTTTCACAGTCTGCCATTGCTCAGGTACATATT
TGTTCCGGGAGAGAGTACGATAATCCATTCACATAGTTCTTTTTCTGCTATGGCCCATGATGCTCTCTTC
CACGCCAAGACAATGGGGCTTCAGACAGTCTTCCAGGACCATTCCCTTTTTGGATTGCTGATGTCAGCT
CGGTGCTTACAAACAAGCTTCTAACCCTGTCTCTTTGTGATACAAACCACATCATTTGTGTGCTTATAC
TAGTAAGGAAAATACTGTACTAAGAGCAGCACTGAATCCTGAAATAGTGTCCGTCATTCTAATGCTGTA
GATCCTACTGACTTCACTCCAGACCCATTTAGAAGGCATGATAGTATAACTATTGTTGTTGTCAGCAGAC
TTGTTTACAGAAAAGGGATCGATTTGCTTAGTGGTATAAATACCTGAAGTCTGTGAGAAATATCCAGATTT
AAATTTATAATTGGAGGAGAGGGACCAAGAGAATCATTTTGAAGAAGTTCGGGAAAGATACCAGCTG
CATGACAGGGTGGCTCTTTGGGAGCTTTAGAACAAGGATGTTAGAAATGCTTAGTTCAAGGACATA
TTTTCTGAATACCTCCCTTACTGAAGCATTCTGCATGGCGATCGTGGAAGCAGCCAGTTGTGGTTTACA
GGTTGTAAGTACCAGAGTTGGTGAATTCCTGAGGTGCTTCCAGAAAACCTTATTATTTTATGTGAGCCT
TCAGTAAAATCTTTGTGGAAGGATTGGAAAAGGCTATTTTCCAAGTGAAGTCAAGGACATTGCCAGCTC
CAGAAAACATCCATAACATAGTAAAGACTTTCTACACCTGGAGGAATGTTGCAGAAAAGAACTGAAAAGGT
ATATGACCGGGTATCAGTGAAGCTGTGTTGCCAATGGACAAACGACTGGACAGACTTATTTCTCACTGC
GGCCAGTAACAGGCTACATCTTTGCTTTGTTGGCAGTTTCACTTCTCTTCTCATTCTTCTTGAGAT
GGATGACTCCAGATTCTATCATTGATGTTGCAATAGATGCCACTGGGCCACGGGGTGCCTGGACTAATAA
CTATTCTACAGTAAAAGAGGGGTGAGAATAATGAGATATCTGAAACCAGGTAG
```



[View online »](#)

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_002641 unedited
 GGTTACATTAGTATACGACTCACTATAGGGCGGCCGGAATCGGCACGAGGGGNACACT
 GNGCGGCCATGGNAACTCACCGTAATAGAGGACACATCTTAACTGGGTTGCTCTAAG
 AACTGATGTCTAAACCGTCTCAGCATGGCCTGTAGAGGAGGAGCTGGGAATGGCCACCGT
 GCCTCAGCTACACTCTCTCGGGATCGATTTGCTTAGTGGTATAATACCTGAACCTGTGTC
 AGAAATATCCAGATTTAAATTTTCATAATTGGAGGAGAGGGACCAAGAGAATCATTTTGG
 AAGAAGTTCGGGAAAGATACCAGCTGCATGACAGGGTGCCTCTTTTGGGAGCTTTAGAAC
 ACAAGGATGTTAGAAATGTCTTAGTTCAAGGACATATTTTTCTGAATACCTCCCTTACTG
 AAGCATTCTGCATGGCGATCGTGAAGCAGCCAGTTGTGGTTTACAGTTGTAAGTACCA
 GAGTTGGTGAATTCTGAGGTGCTTCCAGAAAACCTTATTATTTTATGTGAGCCTTCAG
 TAAAATCTTTGTGTGAAGGATTGAAAAGGCTATTTTCCAACGAAGTCAGGGACATTGC
 CAGCTCCATAAAAACATCCATAACATAGTAAAGACTTTCTACACCTGGAGGAATGTTGCAC
 AAAGAAGTAAAAAGTATATGACCGGTATCAGCGGAAGCTGTGTGCCAATGGACAAAC
 GACTGGACAGACTTATTTTCACTGTGGGCCATAACAGGCTACATCTTTGCCTTGTGGC
 AGGTTTTCACTTCTTCTCCTCATTCTTGAGATGGAGACTCCCGATTCTATCCTTGGAT
 GTTGCAATAAATGCCACTGGGCCCCCGGTGCCCTGGACTAATACCTATTTTCCAGAC
 ATAAGAGGGGTG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_002641 unedited
 CGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTATCAAATGTCATTCTGGTCT
 TTATTTTTGGACATGTAGCATGTTTTAACAAATCAGTTTTTTCATAGGCAACCTTTTGAAA
 CATCAAAGAAATACAATATATTTTTTCAAAATTTCTCATCACTGTAATTCACCTTAAA
 ATCAACTAAGTAGCAGGGTAGAGCAATGTGTTCCATATACCGACCAGTGCAAACGACA
 GTTACAATTAAGGTATCCAGAAAGTTGAAAATTAAGATTTACGTGAAACAAATTTACTT
 CCATTTGTAAAAAAGAAAAATAATAATTTGCAAATCAGTGTTCACAGGCAAGGC
 AACTAATTTAGATCTTATTTCCATCTCAAATAAATGACAGTTTAAAGATTAATGACAA
 TTTAAAAAATTAAGCAAAAATAAAGGAAAAATGGTGGCATGCCTCTAAAACCTGTTG
 AATAGAATAATGGCCAAATATTACAGTTTCTCACTTTCCTATGAATACTGGCACTGTTTA
 TTTTCATGTTTATGTGAGTTTCTATGCATAAAAAATCCCAGTAAGACTGAATAGTTTAAA
 GATCAGTCCATTTTTCTCCAACAAAACCCCTAACTTCTAGATTTTAAAAATTGCACTCTT
 GCTTTTGCATTTTAGTACAAAACAAAACAAAATATATTTCTTTTATATCAGTGCAACCAG
 TTAATAGGCATGGTATTTTTTAAAAAGTAATAAAATTTGTGAATGGTGTGATTNTAAAA
 ATCCTATACAGAATCANCACACTGTCAGAATCTATGTAGTGCACCCACAGTGCCTNNATG
 TTTGAATNACAGTCCTTTTCTACANAACCTTNAGAGTCAAGATNCATATACCACATGTGG
 TAANTGGGGTAAAACCCCTGCTCTGGCACACATGACGTATAACTACCCAGACGTNCTAA
 TTNCACTAGTGCATATACA

Restriction Sites:

NotI-NotI

ACCN:

NM_002641

Insert Size:

2800 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:

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: [NM_002641.1](#), [NP_002632.1](#)

RefSeq Size: 3589 bp

RefSeq ORF: 1455 bp

Locus ID: 5277

UniProt ID: [P37287](#)

Cytogenetics: Xp22.2

Domains: Glycos_transf_1

Protein Families: Transmembrane

Protein Pathways: Glycosylphosphatidylinositol(GPI)-anchor biosynthesis, Metabolic pathways

Gene Summary: This gene encodes a protein required for synthesis of N-acetylglucosaminyl phosphatidylinositol (GlcNAc-PI), the first intermediate in the biosynthetic pathway of GPI anchor. The GPI anchor is a glycolipid found on many blood cells and which serves to anchor proteins to the cell surface. Paroxysmal nocturnal hemoglobinuria, an acquired hematologic disorder, has been shown to result from mutations in this gene. Alternate splice variants have been characterized. A related pseudogene is located on chromosome 12. [provided by RefSeq, Jun 2010]
Transcript Variant: This variant (1) represents the longest transcript and encodes the longer isoform (1).