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Product datasheet for RC214528

PIGA (NM_002641) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PIGA (NM_002641) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PIGA
Synonyms:	GPI3; MCAHS2; PIG-A; PNH1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

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ORF Nucleotide Sequence:

>RC214528 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCTGTAGAGGAGGAGCTGGGAATGGCCACCGTGCCTCAGCTACACTCTCTCGGGTTAGCCCTGGAA
GTCTTTACACATGTAGAACCCGTACCCATAATATATGCATGGTATCTGACTTTTTCTACCCAAATATGGG
AGGCGTGGAAAGCCACATTTACCAGCTCTCTCAGTGCCTGATTGAAAGAGGGCATAAGGTTATAATTGTC
ACCCATGCTTATGGAAATCGAAAAGGCATCCGTTACCTCACCAGTGGCCTCAAAGTCTATTACTTGCCTC
TGAAAGTCATGTACAACCAGTCTACAGCCACGACCCTCTTTCACAGTCTGCCATTGCTCAGGTACATATT
TGTTCGGGAGAGAGTCACGATAATCCATTCACATAGTTCTTTTTCTGCTATGGCCCATGATGCTCTCTTC
CACGCCAAGACAATGGGGCTTCAGACAGTCTTCACGGACCATTCCCTTTTTGGATTTGCTGATGTCAGCT
CGGTGCTTACAAACAAGCTTCTAACCGTGTCTCTTTGTGATACAAACCACATCATTTGTGTGTCTTATAC
TAGTAAGGAAAATACTGTACTAAGAGCAGCACTGAATCCTGAAATAGTGTCCGTCATTCCTAATGCTGTA
GATCCTACTGACTTCACTCCAGACCCATTTAGAAGGCATGATAGTATAACTATTGTTGTTGTCAGCAGAC
TTGTTTACAGAAAAGGGATCGATTTGCTTAGTGGTATAATACCTGAACTCTGTCAGAAATATCCAGATTT
AAATTTCATAATTGGAGGAGAGGGACCAAAGAGAATCATTTTGGAAGAAGTTCGGGAAAGATACCAGCTG
CATGACAGGGTGCGTCTTTTGGGAGCTTTAGAACACAAGGATGTTAGAAATGTCTTAGTTCAAGGACATA
TTTTTCTGAATACCTCCCTTACTGAAGCATTCTGCATGGCGATCGTGGAAGCAGCCAGTTGTGGTTTACA
GGTTGTAAGTACCAGAGTTGGTGGAATTCCTGAGGTGCTTCCAGAAAACCTTATTATTTTATGTGAGCCT
TCAGTAAAATCTTTGTGTGAAGGATTGGAAAAGGCTATTTTCCAACTGAAGTCAGGGACATTGCCAGCTC
CAGAAAACATCCATAACATAGTAAAGACTTTCTACACCTGGAGGAATGTTGCAGAAAGAACTGAAAAGGT
ATATGACCGGGTATCAGTGGAAGCTGTGTTGCCAATGGACAAACGACTGGACAGACTTATTTCTCACTGC
GGCCCAGTAACAGGCTACATCTTTGCTTTGTTGGCAGTTTTCAACTTCCTCTTCCTCATTTTCTTGAGAT
GGATGACTCCAGATTCTATCATTGATGTTGCAATAGATGCCACTGGGCCACGGGGTGCCTGGACTAATAA
CTATTCTCACAGTAAAAGAGGGGGTGAGAATAATGAGATATCTGAAACCAGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC214528 protein sequence
Red=Cloning site Green=Tags(s)

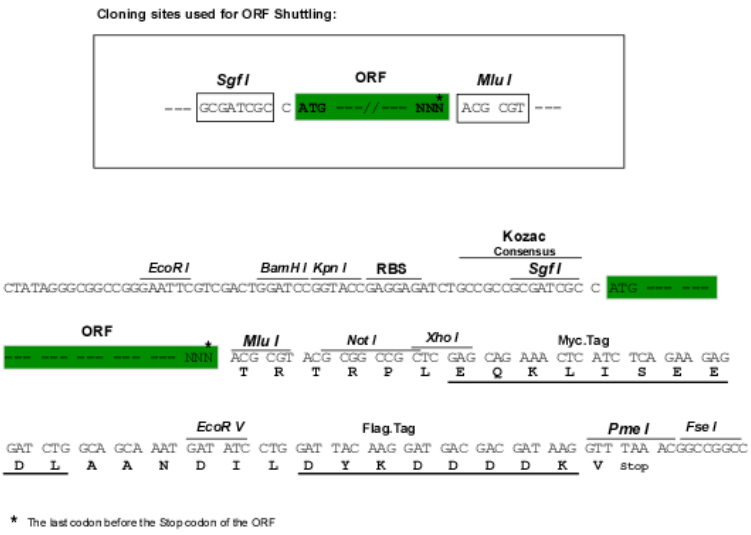
MACRGGAGNGHRASATLSRVSPGSLYTCRTRTHNICMVSDFFYPNMGGVESHIYQLSQCLIERGHKVIIV
THAYGNRKGIRYLTSGLKVYYLPLKVMYNQSTATTLFHSLPLLRYIFVRERVTIIHSHSSFSAMAHDALF
HAKTMGLQTVFTDHSLFGFADVSSVLTNKLLTVSLCDTNHIICVSYTSKENTVLRAALNPEIVSVIPNAV
DPTDFTPDPFRRHDSITIVVVSRLVYRKGIDLLSGIIPELCQKYPDLNFIIGGEGPKRIILEEVRERYQL
HDRVRLLGALEHKDVRNVLVQGHIFLNTSLTEAFCMAIVEAASCGLQVVSTRVGGIPEVLPENLIILCEP
SVKSLCEGLEKAIFQLKSGTLPAPENIHNIVKTFYTWRNVAERTEKVYDRVSVEAVLPMDKRLDRLISHC
GPVTGYIFALLAVFNFLFLIFLRWMTPDSIIDVAIDATGPRGAWTNNYSHSKRGGENNEISETR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6337_c05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002641

ORF Size: 1452 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_002641.4

RefSeq Size: 3644 bp

RefSeq ORF: 1455 bp

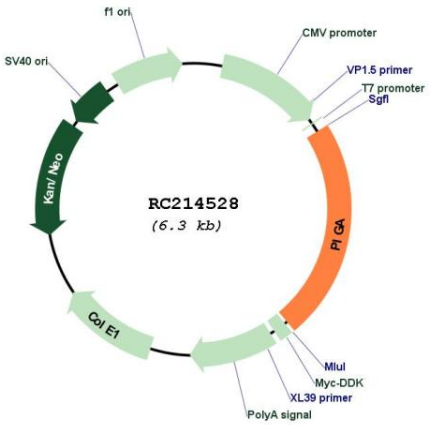
Locus ID: 5277

UniProt ID: P37287

Cytogenetics: Xp22.2

Domains:	Glycos_transf_1
Protein Families:	Transmembrane
Protein Pathways:	Glycosylphosphatidylinositol(GPI)-anchor biosynthesis, Metabolic pathways
MW:	54.1 kDa
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]

Product images:



Circular map for RC214528