

Product datasheet for **RC402732**

Glypican 3 (GPC3) (NM_004484) Human Mutant ORF Clone

Product data:

Product Type:	Mutant ORF Clones
Product Name:	Glypican 3 (GPC3) (NM_004484) Human Mutant ORF Clone
Mutation Description:	R199X
Affected Codon#:	199
Affected NT#:	595
Nucleotide Mutation:	GPC3 Mutant (R199X), Myc-DDK-tagged ORF clone of Homo sapiens glypican 3 (GPC3), transcript variant 2 as transfection-ready DNA
Effect:	Simpson-Golbi-Behmel syndrome
Symbol:	GPC3
Synonyms:	DGSX; GTR2-2; MXR7; OCI-5; SDYS; SGB; SGBS; SGBS1
E. coli Selection:	Kanamycin (25 ug/mL)
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
Tag:	Myc-DDK
ACCN:	NM_004484
ORF Size:	594 bp
Restriction Sites:	Sgfl-Mlul



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ORF Nucleotide Sequence:

>RC402732 representing NM_004484
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCGGGACCGTGCACCGCGTGTGGTGGTGGCGATGCTGCTCAGCTTGGACTTCCCGGGACAGG
 CGCAGCCCCCGCGCCGCCGCCGAGCACCCTGTACCAAGTCCGCTCCTTCTCCAGAGACTGCAGCC
 CGGACTCAAGTGGGTGCCAGAACTCCCGTGCCAGGATCAGATTTGCAAGTATGTCTCCCTAAGGGCCCA
 ACATGCTGCTCAAGAAAGATGGAAGAAAAATACCAACTAACAGCACGATTGAACATGGAACAGCTGCTTC
 AGTCTGCAAGTATGGAGCTCAAGTTCTTAATTATTCAGAATGCTGCGTTTTTCCAAGAGGCCCTTTGAAAT
 TGTTGTTCCGCATGCCAAGAATAACCAATGCCATGTTCAAGAACAATACCCAAGCCTGACTCCACAA
 GCTTTTGAGTTTGTGGTGAATTTTTCACAGATGTGTCTCTACATCTTGGTTCTGACATCAATGTAG
 ATGACATGGTCAATGAATGTTTGACAGCCTGTTCCAGTCATCTATACCCAGCTAATGAACCCAGGCC
 CCTGATTCAGCCTTGGACATCAATGAGTGCCTC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGA TAAGGTTTAA

Protein Sequence:

>RC402732 representing NM_004484
 Red=Cloning site Green=Tags(s)

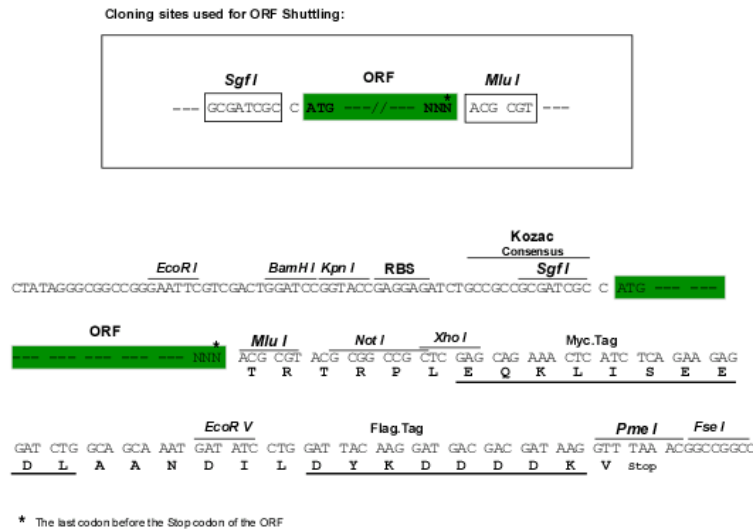
MAGTVRTACLVVAMLLSLDFPGQAQPPPPPDATCHQVRSFFQRLQPGLKWPETVPGSDLQVCLPKGP
 TCCSRKMEEKYQLTARLNMEQLLQSASMEKFLIIQNAAVFQEA FEIVVRHAKNYTNAMFKNNYPSLTPQ
 AFEFVGEFFTDVSLYILGSDINVDDMVNELFDSLFPVIYQLMNPGLPDSALDINECL

SGPTRRRRL**EQKLI**SEEDLAANDILDYKDDDDK**V**

Restriction Sites:

SgfI-MluI

Cloning Scheme:



OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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).

RefSeq: [NP_004475](#)

RefSeq Size: 594 bp

RefSeq ORF: 1743 bp

Locus ID: 2719

Cytogenetics: Xq26.2

Domains: Glypican

Protein Families: Druggable Genome

MW: 21.8 kDa

Gene Summary: Cell surface heparan sulfate proteoglycans are composed of a membrane-associated protein core substituted with a variable number of heparan sulfate chains. Members of the glypican-related integral membrane proteoglycan family (GRIPS) contain a core protein anchored to the cytoplasmic membrane via a glycosyl phosphatidylinositol linkage. These proteins may play a role in the control of cell division and growth regulation. The protein encoded by this gene can bind to and inhibit the dipeptidyl peptidase activity of CD26, and it can induce apoptosis in certain cell types. Deletion mutations in this gene are associated with Simpson-Golabi-Behmel syndrome, also known as Simpson dysmorphia syndrome. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2009]