

Product datasheet for RC402735

OriGene Technologies, Inc.

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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: R254X

Affected Codon#: 254

Affected NT#: 760

Nucleotide Mutation: GPC3 Mutant (R254X), 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 Neomycin

Selection:

Vector: pCMV6-Entry (PS100001)

Tag: Myc-DDK
ACCN: NM 004484

ORF Size: 759 bp
Restriction Sites: Sgfl-Mlul



ORF Nucleotide Sequence:

>RC402735 representing NM_004484

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTCGGATTACAAGGATGACGACGA TAAGGTTTAA

Protein Sequence:

>RC402735 representing NM_004484 Red=Cloning site Green=Tags(s)

MAGTVRTACLVVAMLLSLDFPGQAQPPPPPPDATCHQVRSFFQRLQPGLKWVPETPVPGSDLQVCLPKGP TCCSRKMEEKYQLTARLNMEQLLQSASMELKFLIIQNAAVFQEAFEIVVRHAKNYTNAMFKNNYPSLTPQ AFEFVGEFFTDVSLYILGSDINVDDMVNELFDSLFPVIYTQLMNPGLPDSALDINECLRGARRDLKVFGN FPKLIMTQVSKSLQVTRIFLQALNLGIEVINTTDHLKFSKDCG

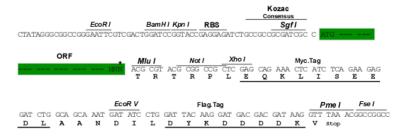
SGPTRTRRLEQKLISEEDLAANDILDYKDDDDK**V**

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF



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 customport@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. <u>More info</u>

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: 759 bp
RefSeq ORF: 1743 bp
Locus ID: 2719
Cytogenetics: Xq26.2
Domains: Glypican

Protein Families: Druggable Genome

MW: 27.8 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]