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Product datasheet for RC402740

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:	G556R
Affected Codon#:	556
Affected NT#:	1666
Nucleotide Mutation:	GPC3 Mutant (G556R), 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:	1740 bp
Restriction Sites:	SgfI-MluI

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ORF Nucleotide Sequence:

>RC402740 representing NM_004484
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCGGGACCGTGCGCACCGCGTGCTTGGTGGTGGCGATGCTGCTCAGCTTGGACTTCCCGGGACAGG
CGCAGCCCCCGCCGCCGCCGCCGGACGCCACCTGTCACCAAGTCCGCTCCTTCTTCCAGAGACTGCAGCC
CGGACTCAAGTGGGTGCCAGAAACTCCCGTGCCAGGATCAGATTTGCAAGTATGTCTCCCTAAGGGCCCA
ACATGCTGCTCAAGAAAGATGGAAGAAAAATACCAACTAACAGCACGATTGAACATGGAACAGCTGCTTC
AGTCTGCAAGTATGGAGCTCAAGTTCTTAATTATTCAGAATGCTGCGGTTTTCCAAGAGGCCTTTGAAAT
TGTTGTTCGCCATGCCAAGAACTACACCAATGCCATGTTCAAGAACAACTACCCAAGCCTGACTCCACAA
GCTTTTGAGTTTGTGGGTGAATTTTTCACAGATGTGTCTCTCTACATCTTGGGTTCTGACATCAATGTAG
ATGACATGGTCAATGAATTGTTTGACAGCCTGTTTCCAGTCATCTATACCCAGCTAATGAACCCAGGCCT
GCCTGATTCAGCCTTGGACATCAATGAGTGCCTCCGAGGAGCAAGACGTGACCTGAAAGTATTTGGGAAT
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ATCTTGGAATTGAAGTGATCAACACAACTGATCACCTGAAGTTCAGTAAGGACTGTGGCCGAATGCTCAC
CAGAATGTGGTACTGCTCTTACTGCCAGGGACTGATGATGGTTAAACCCTGTGGCGGTTACTGCAATGTG
GTCATGCAAGGCTGTATGGCAGGTGTGGTGGAGATTGACAAGTACTGGAGAGAATACATTCTGTCCCTTG
AAGAACTTGTGAATGGCATGTACAGAATCTATGACATGGAGAACGTACTGCTTGGTCTCTTTTCAACAAT
CCATGATTCTATCCAGTATGTCCAGAAGAATGCAGGAAAGCTGACCACCACTATTGGCAAGTTATGTGCC
CATTCTCAACAACGCCAATATAGATCTGCTTATTATCCTGAAGATCTCTTTATTGACAAGAAAGTATTAA
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CTTTGCTGGAATGGACAAGAACTCGTGGAGAGATACAGCCAAAAGGCAGCAAGGAATGGAATGAAAAACC
AGTTCAATCTCCATGAGCTGAAAATGAAGGGCCCTGAGCCAGTGGTCAGTCAAATTATTGACAAACTGAA
GCACATTAACCAGCTCCTGAGAACCATGTCTATGCCCAAAGGTAGAGTTCTGGATAAAAACCTGGATGAG
GAAGGGTTTGAAAGTGGAGACTGCGGTGATGATGAAGATGAGTGCATTGGAGGCTCTGGTGATGGAATGA
TAAAAGTGAAGAATCAGCTCCGCTTCCTTGCAGAACTGGCCTATGATCTGGATGTGGATGATGCGCCTGG
AAACAGTCAGCAGGCAACTCCGAAGGACAACGAGATAAGCACCTTTCACAACCTCAGGAACGTTCATTCC
CCGCTGAAGCTTCTCACCAGCATGGCCATCTCGGTGGTGTGCTTCTTCTTCCTGGTGCAC

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGA TAAGGTTTAA

Protein Sequence:

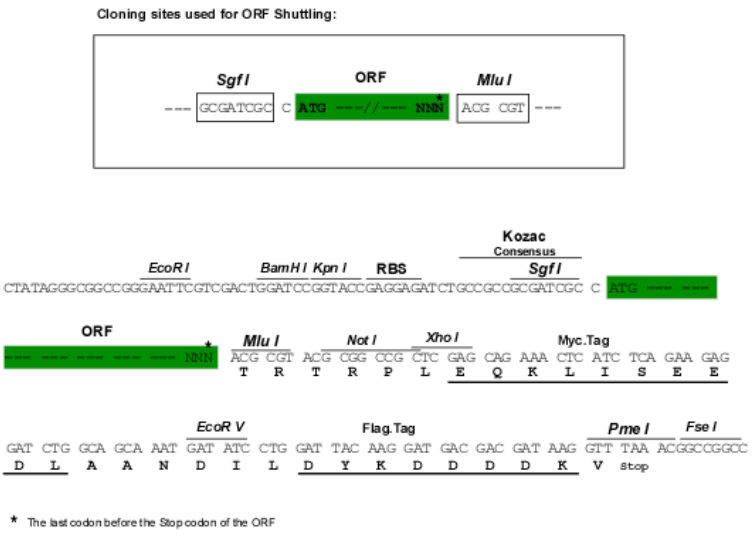
>RC402740 representing NM_004484
Red=Cloning site Green=Tags(s)

MAGTVRTACLVVAMLLSLDFPGQAQPPPPPPDATCHQVRSFFQRLQPGLKWVPETPVPGSDLQVCLPKGP
TCCSRKMEEKYQLTARLNMEQLLQSASMELKFLIIQNAAVFQEAFEIVVRHAKNYTNAMFKNNYPSLTPQ
AFEFVGEFFTDVSLYILGSDINVDDMVNELFDSLFPVIYTQLMNPGLPDSALDINECLRGARRDLKVFGN
FPKLIMTQVSKSLQVTRIFLQALNLGIEVINTTDHLKFSKDCGRMLTRMWYCSYCQGLMMVKPCGGYCNV
VMQGCMAGVVEIDKYWREYILSLEELVNGMYRIYDMENVLLGLFSTIHDSIQYVQKNAGKLTTTIGKLCA
HSQQRQYRSAYYPEDLFIDKKVLKVAHVEHEETLSSRRRELIQKLKSFISFYSALPGYICSHSPVAENDT
LCWNGQELVERYSQKAARNGMKNQFNLHELKMKGPEPVVSQIIDKLKHINQLLRTMSMPKGRVLDKNLDE
EGFESGDCGDDEDECIGGSGDGMIKVKNQLRFLAELAYDLDVDDAPGNSQQATPKDNEISTFHNLRNVHS
PLKLLTSMAISVVCFFFLVH

SGPTRTRRLEQKLISEEDLAANDILDYKDDDDKV

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:	1740 bp
RefSeq ORF:	1743 bp
Locus ID:	2719
Cytogenetics:	Xq26.2
Domains:	Glypican
Protein Families:	Druggable Genome
MW:	63.8 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]