

## Product datasheet for **RC228491**

### Glypican 3 (GPC3) (NM\_001164617) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Glypican 3 (GPC3) (NM_001164617) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Glypican 3
Synonyms:	DGSX; GTR2-2; MXR7; OCI-5; SDYS; SGB; SGBS; SGBS1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC228491 representing NM\_001164617  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCCGGGACCGTGCACCCGCTGCTTGGTGGTGGCGATGCTGCTCAGCTTGGACTTCCCGGGACAGG  
 CGCAGCCCCCGCCGCCGCCGCGGACGCCACCTGTCACCAAGTCCGCTCCTTCTCCAGAGACTGCAGCC  
 CGGACTCAAGTGGGTGCCAGAACTCCCGTGCCAGGATCAGATTTGCAAGTATGTCTCCCTAAGGGCCCA  
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 AGTCTGCAAGTATGGAGCTCAAGTTCTTAATTATTCAGAATGCTGCGGTTTTCCAAGAGGCTTTGAAAT  
 TGTTGTTCCGCATGCCAAGAACTACACCAATGCCATGTTCAAGAACAACCTACCAAGCCTGACTCCACAA  
 GCTTTTGAGTTTGGTGAATTTTACAGATGTGTCTCTACATCTTGGGTTCTGACATCAATGTAG  
 ATGACATGGTCAATGAATTGTTTGACAGCCTGTTCCAGTCATCTATACCCAGCTAATGAACCCAGGCT  
 GCCTGATTCAGCCTTGGACATCAATGAGTGCCTCCGAGGAGCAAGACGTGACCTGAAAGTATTTGGGAAT  
 TTCCCAAGCTTATTATGACCCAGGTTTCCAAGTCACTGCAAGTCACTAGGATCTTCTTCCAGGCTCTGA  
 ATCTTGAATGAAGTATCAACACAACCTGATCACCTGAAGTTCAGTAAGGACTGTGGCCGAATGCTCAC  
 CAGAAATGGTACTGCTCTTACTGCCAGGGACTGATGATGGTTAAACCCTGTGGCGGTTACTGCAATGTG  
 GTCATGCAAGGCTGTATGGCAGGTGTGGTGGAGATTGACAAGTACTGGAGAGAATACATTCTGTCCTTG  
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 CCATGATTCATCCAGTATGTCCAGAAGATGCAGGAAAGCTGACCACCACTGAAACTGAGAAGAAAATA  
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 AAGGGTTTGAAGTGGAGACTGCGGTGATGATGAAGATGAGTGCATTGGAGGCTCTGGTATGGAATGAT  
 AAAAGTGAAGAATCAGCTCCGCTTCTTGCAGAACTGGCCTATGATCTGGATGTGGATGATGCGCCTGGA  
 AACAGTCAGCAGCAACTCCGAAGGACAACGAGATAAGCACCTTTCACAACCTCGGGAACGTTTATTCC  
 CGCTGAAGCTTCTACCAGCATGCCATCTCGGTGGTGTCTTCTTCTCTGGTGCAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC228491 representing NM\_001164617  
 Red=Cloning site Green=Tags(s)

MAGTVRTACLVVAMLLSLDFPGQAQPPPPPDATCHQVRSFFQRLQPGLKWPETPVPGSDLQVCLPKGP  
 TCCSRKMEEKYQLTARLNMEQLLQSAMELKFLIIQNAAVFQEAFFIVVRHAKNYTNAMFKNNYPSLTPQ  
 AFEFVGEFFTDVSLYILGSDINVDDMVNELFDSLFPVIYQMLMNPGLPDSALDINECLRGARRDLKVFNG  
 FPKLIMTQVSKSLQVTRIFLQALNLGIEVINTDHLKFSKDCGRMLTRMWYCSYQGLMMVKPCGGYCNV  
 VMQGCMAVVVEIDKYWREYILSLEELVNGMYRIYDMENVLLGLFSTIHDSIQYVQKNAGKLTTEKTKI  
 WHFKYPIFFLCIGLDLQIGKLCASQQRQYRSAYYPEDLFDKVKLVKVAHVEHEETLSSRRRELIQKLS  
 FISFYALPGYICSHSPAENDTLCWNGQELVERYSQKAARNGMKNQFNHHELMKMGPEPVVSIIDKLL  
 HINQLLRTMSMPKGRVLDKNLDEEFESGDCGDEDECIGSGDGMKVKVKNQLRFLAELAYLDVDDAPG  
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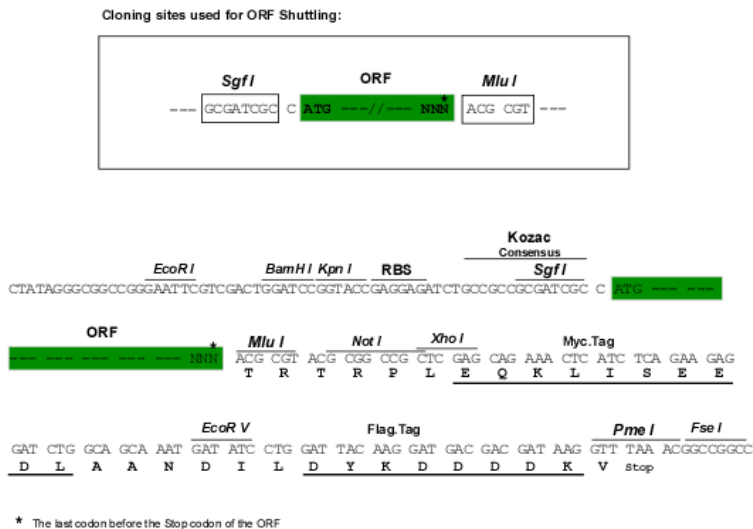
**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8038\\_c09.zip](https://cdn.origene.com/chromatograms/mk8038_c09.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_001164617

ORF Size: 1809 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\\_001164617.2](#)

RefSeq ORF: 1812 bp

Locus ID: 2719

UniProt ID: [P51654](#)

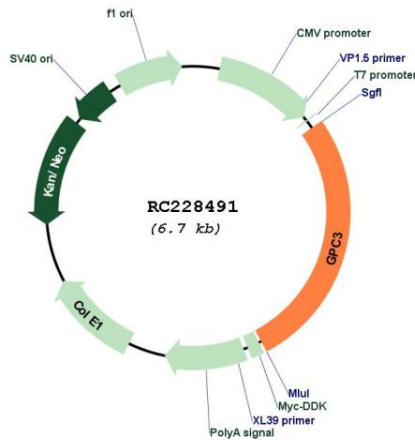
**Cytogenetics:** Xq26.2

**Protein Families:** Druggable Genome

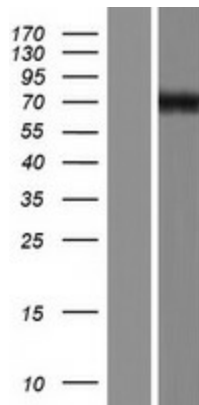
**MW:** 68.41 kDa

**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]

**Product images:**



Circular map for RC228491



Western blot validation of overexpression lysate (Cat# [LY431519]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC228491 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).