

Active Recombinant Human GPC2 protein, His-tagged

Cat. No. GPC2-28H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human GPC2 (Pro18-Ser553 & Ala359-Ser553) fused with His tag at C-terminal was expressed in NS0.
Species	Human
Source	Mammalian Cells
ProteinLength	Pro18-Ser553 & Ala359-Ser553
Description	The glypicans (GPC) constitute a family of heparan sulfate proteoglycans that are attached to the cell surface by a glycosylphosphatidylinositol (GPI) anchor. Six members of this family have been identified in mammals (GPC1-GPC6). All glypican core proteins contain an N-terminal signal peptide, a large globular cysteine-rich domain (CRD) with 14 invariant cysteine residues, a stalk-like region containing the heparan sulfate attachment sites, and a C-terminal GPI attachment site. Based on the degree of their amino acid sequence similarity, two subfamilies of glypicans have been defined. One subfamily (sharing from 35-63% sequence homology) includes GPC1, 2, 4, and 6, while the second subfamily (sharing 54% sequence identity) includes GPC3 and 5. Proteins between the two subfamilies also share 17-25% sequence similarity. Glypicans are widely expressed in adult and fetal tissues. During embryonic development, the expression level of the various glypicans changes in a stage and tissue specific manner. GPC2, also known as cerebroglycan, is primarily expressed in developing neuronal tissues including the brain, spinal cord, dorsal root ganglia, and cranial nerves. It is found on the tracts of actively growing axons. Cell

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	surface GPC2 binds midkine, indicating midkine-GPC2 interaction may participate in neuronal cell migration and neurite outgrowth.
Predicted N Terminal	Pro18 & Ala359
Form	Lyophilized from a 0.2 µm filtered solution in PBS.
Bio-activity	Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human Glypican 2 at 4 µg/mL (100 µL/well) can bind Recombinant Human Midkine with a linear range of 4-200 ng/mL.
Molecular Mass	Predicted Molecular Mass: 59.2 kDa; SDS-PAGE: 60 kDa, reducing conditions.
Endotoxin	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>90%, by SDS-PAGE under reducing conditions and visualized by silver stain
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
Reconstitution	Reconstitute at 100 µg/mL in sterile PBS.
Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

GENE INFORMATION

Gene Name	GPC2 glypican 2 [Homo sapiens]
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Official Symbol	GPC2
Synonyms	GPC2; glypican 2 (cerebroglycan); cerebroglycan; DKFZp547M109; FLJ38962; glypican proteoglycan 2; cerebroglycan proteoglycan; cerebroglycan proteoglycan; glypican proteoglycan 2, cerebroglycan proteoglycan
Gene ID	221914
mRNA Refseq	NM_152742
Protein Refseq	NP_689955
MIM	Q8N158
UniProt ID	Q8N158

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