

Glypican 4 (GPC4) Active Protein | GPC4 active protein

Active Glypican 4 (GPC4)

CATALOG # AAA161822	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Glypican 4 (GPC4); Active Glypican 4 (GPC4); Glypican 4; K-Glypican; Glypican Proteoglycan 4; Secreted glypican-44; GPC4 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 90% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Ala222~Leu 468
Applicable Applications for GPC4 active protein	Activity Assay, Cell Culture
Species	Rat
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	7.1
Research Area	Tumor immunity, Developmental science
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months

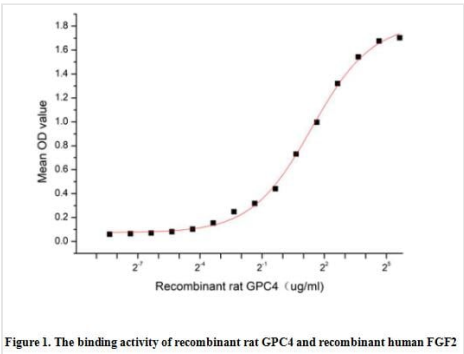


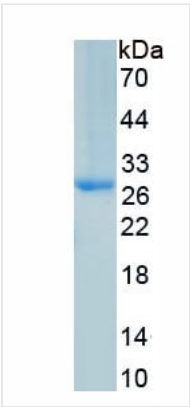
Figure 1. The binding activity of recombinant rat GPC4 and recombinant human FGF2

Bioactivity

Glypican 4 (GPC4) is a cell surface heparan sulfate proteoglycans which 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. Besides, Fibroblast Growth Factor 2, Basic (FGF2) has been identified as an interactor of GPC4, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant rat GPC4 and recombinant human FGF2. Briefly, GPC4 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to FGF2-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-GPC4 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50 uL stop solution to the wells and read at 450 nm immediately. The binding activity of recombinant rat GPC4 and recombinant human FGF2 was shown in Figure 1, the EC50 for this effect is 2.64 ug/mL.

SDS-PAGE

Figure. SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for GPC4 active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	62078949
NCBI GeneID	317322
NCBI Accession #	NP_001014130.1
NCBI GenBank Nucleotide #	NM_001014108.1
UniProt Accession #	Q642B0
Molecular Weight	62,562 Da
NCBI Official Full Name	glypican-4
NCBI Official Synonym Full Names	glypican 4
NCBI Official Symbol	Gpc4
NCBI Protein Information	glypican-4
UniProt Protein Name	Glypican 4
UniProt Gene Name	Gpc4

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

