

Glypican 1 (GPC1) Active Protein | GPC1 active protein

Active Glypican 1 (GPC1)

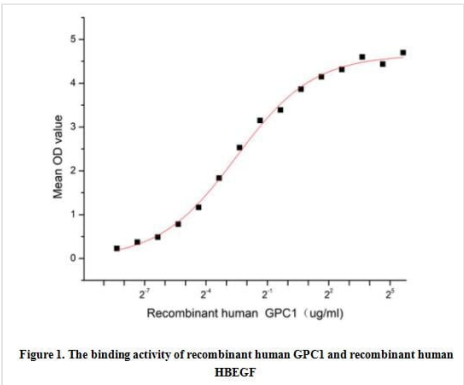
CATALOG # AAA161824	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
-------------------------------	-----------------------	---

PRODUCT SYNONYMS

Glypican 1 (GPC1); Active Glypican 1 (GPC1); Glypican 1; Glypican Proteoglycan 1; Secreted glypican-14; GPC1 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 95% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Leu114~Lys 277
Applicable Applications for GPC1 active protein	Activity Assay, Cell Culture
Species	Human
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	8.6
Research Area	Tumor immunity, Pulmonology, Hepatology
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months

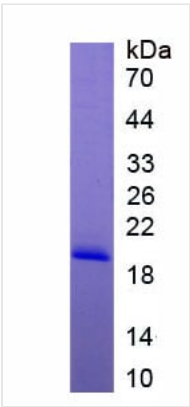


Bioactivity

Glypican 1 (GPC1) is one of the six glycosylphosphatidylinositol-anchored, cell surface heparan sulfate proteoglycans that acts as a growth factor signaling. Cells known to express GPC-1 include neurons, smooth and skeletal muscle cells, keratinocytes, osteoblasts, Schwann cells, immature dendritic cells, and tumor, plus tumor-associated vascular endothelial cells. The function of GPC-1 is complex and varied, it can modulate various signaling pathways including Heparin Binding Epidermal Growth Factor Like Growth Factor (HBEGF), fibroblast growth factors (FGF), vascular endothelial growth factor-A (VEGF-A), transforming growth factor-beta (TGF-beta), Wnt, Hedgehog (Hh), and bone morphogenic protein (BMP) through specific interactions with pathway ligands and receptors. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human GPC1 and recombinant human HBEGF. Briefly, GPC1 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to HBEGF-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-GPC1 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37 degree C, 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 450/630 nm immediately. The binding activity of recombinant human GPC1 and recombinant human HBEGF was shown in Figure 1, the EC50 for this effect is 0.17 ug/mL.

SDS-PAGE

Figure. SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for GPC1 active protein	Active proteins
--	-----------------

NCBI AND UNIPROT INFORMATION

NCBI GI #	167001141
NCBI GeneID	2817
NCBI Accession #	NP_002072.2
NCBI GenBank Nucleotide #	NM_002081.2
UniProt Accession #	P35052; Q53QM4
Molecular Weight	61,680 Da
NCBI Official Full Name	glypican-1
NCBI Official Synonym Full Names	glypican 1
NCBI Official Symbol	GPC1
NCBI Official Synonym Symbols	glypican
NCBI Protein Information	glypican-1; glypican proteoglycan 1
UniProt Protein Name	Glypican-1
UniProt Gene Name	GPC1

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/glypican-1-gpc1/161824>