

## Glypican-1/GPC1 Protein, Mouse (HEK293, His)

Cat. No.:	HY-P70928
Synonyms:	Glypican-1; Gpc1
Species:	Mouse
Source:	HEK293
Accession:	Q9QZF2 (D24-S529)
Gene ID:	14733
Molecular Weight:	Approximately 60 kDa

### PROPERTIES

#### AA Sequence

DPASKSRSCS	EVRQIYGAKG	FSLSDVPPQAE	ISGEHLRICP
QGYTCCTSEM	EENLANHSRM	ELESALHDSS	RALQATLATQ
LHGIDDDHFQR	LLNDSERTLQ	EAFPGAFGDL	YTQNTRAFRD
LYAELRLYYR	GANLHLEETL	AEFWARLLER	LFKQLHPQLL
PDDYLDCLGK	QAEALRPFGD	APRELRLRAT	RAFVAARSFV
QGLGVASDVV	RKVAQVPLAP	ECSRAIMKLV	YCAHCRGVPG
ARPCPDYCRN	VLKGC LANQA	DLDAEWRNLL	DSMVLITDKF
WGP SGAESVI	GGVHVWLAEA	INALQDNKDT	LTAKVIQACG
NPKVNPHGSG	PEEKRRRGKL	ALQEKPSTGT	LEKLVSEAKA
QLRDIQDFWI	SLPGTLCSEK	MAMSPASDDR	CWNGISKGRY
LPEVMGDGLA	NQINNPEVEV	DITKPDMTIR	QQIMQLKIMT
NRLRGAYGGN	DVDFQDASDD	GSGSGSGGGC	PDDTTCGRRVS
KKSSSSRTP L	THALPGLSEQ	EGQKTS	

**Biological Activity** 2 µg/mL (100 µL/well) of immobilized Human FGFB can bind Mouse GPC1-His with an ED<sub>50</sub> value of 0.4-2 µg/mL.

**Appearance** Lyophilized powder.

**Formulation** Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.

**Endotoxin Level** <1 EU/µg, determined by LAL method.

**Reconstitution** It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH<sub>2</sub>O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).

**Storage & Stability** Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

**Shipping** Room temperature in continental US; may vary elsewhere.

## DESCRIPTION

### Background

Glypican-1 (GPC1) Protein is a cell surface proteoglycan characterized by the presence of heparan sulfate. It binds to alpha-4 (V) collagen through its heparan sulfate side chains, playing a role in Schwann cell myelination. Additionally, GPC1 may act as a catalyst, enhancing the conversion rate of prion protein PRPN(C) to PRNP(Sc) by associating with both forms of PRPN through its heparan sulfate side chains, facilitating their interaction and targeting them to lipid rafts. GPC1 is essential for proper skeletal muscle differentiation, as it sequesters FGF2 in lipid rafts, preventing its binding to receptors (FGFRs) and inhibiting FGF-mediated signaling. Moreover, GPC1 exhibits the ability to bind Cu(2+) or Zn(2+) ions.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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