

**Recombinant Human Glypican-1/GPC1 Protein(N-6His)**

**Cat.NO.: TP05220**

3th Edition

**Synonyms:**Glypican-1; GPC1

**Description:**The Glypicans are a small multigene family of GPI-linked proteoglycans that play a key role in growth factor signaling. Human Glypican 1 (GPC1) is synthesized as a 558 amino acid (aa) preproprecursor that contains a 23 aa signal sequence, a 507 aa mature segment, and a 28 aa C-terminal prosegment. There are two potential N-linked and four potential O-linked sites for glycosylation or glycanation. There are potentially two heparan sulfate (HS) modifications on GPC1 that could contribute to a native molecular weight of approximately 200 kDa. Mature human GPC1 shares 91% aa identity with mature mouse GPC1. Cells known to express GPC1 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 GPC1 is complex and varied. As a proteoglycan, it appears to make use of its HS adduct to impact select growth factor activity. This is accomplished by having juxtramembrane HS attachment sites, and a flexible, GPI-linkage.

**Form:**PBS

**Molecular Weight:**57.7 kDa

**Sequences:**Asp24-Thr529

**Purity:**> 95% by HPLC

**Concentration:**

**Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.