



Recombinant Protein Technical Manual
Recombinant Human Glypican/GPC1 Protein (His
Tag)
RPES5144

Product Data:

Product SKU: RPES5144

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P35052

Protein Information:

Molecular Mass: 57.7 kDa

AP Molecular Mass: 65-70 kDa

Tag: N-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Glypican; GPC1

Immunogen Information:

Sequence: Asp24-Thr529

Background:

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.