Active Glypican 3 (GPC3)

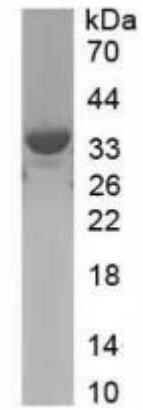
Catalog#:PEM12575

概述（Summary）

别称（Alternative Names）	DGSX; OCI5; SDYS; SGB; SGBS1; MXR7; Glypican Proteoglycan 3; GTR2-2; Intestinal protein OCI-5; Secreted glypican-3
纯度（Purity）	Greater than 90% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Ile344-Ser559】
Accession #	Q8CFZ4
表达宿主（Host）	E.coli
种属（Species）	Mus musculus (Mouse)
预测分子量（Predicted MW）	28.1 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Cell surface proteoglycan that bears heparan sulfate. Negatively regulates the hedgehog signaling pathway when attached via the GPI-anchor to the cell surface by competing with the hedgehog receptor PTC1 for binding to hedgehog proteins. Binding to the hedgehog protein SHH triggers internalization of the complex by endocytosis and its subsequent lysosomal degradation. Positively regulates the canonical Wnt signaling pathway by binding to the Wnt receptor Frizzled and stimulating the binding of the Frizzled receptor to Wnt ligands. Positively regulates the non-canonical Wnt signaling pathway. Binds to CD81

which decreases the availability of free CD81 for binding to the transcriptional repressor HHEX, resulting in nuclear translocation of HHEX and transcriptional repression. Inhibits the dipeptidyl peptidase activity of DPP4. Plays a role in limb patterning and skeletal development by controlling the cellular response to BMP4. Modulates the effects of growth factors BMP2, BMP7 and FGF7 on renal branching morphogenesis. Required for coronary vascular development. Plays a role in regulating cell movements during gastrulation.

电泳图（SDS-PAGE image）



Greater than 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

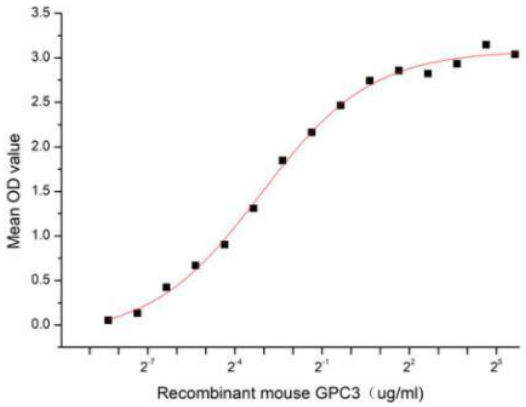


Figure 1. The binding activity of recombinant mouse GPC3 and recombinant rat IGF2

Glypican-3 (GPC3), a 70 kDa protein, is a member of the glypican family that attaches to the cell surface by a glycosylphosphatidylinositol anchor, is specifically up-regulated in hepatocellular carcinoma (HCC) although rarely or not expressed in normal liver tissues, making it a perfect diagnostic and treatment target for HCC. GPC3 is also a negative transcriptional regulator and tumor suppressor that inhibits the growth of breast, ovary, and lung cancer cells. It is reported that GPC3 can form a complex with insulin-like growth factor 2 (IGF2), and might thereby modulate IGF2 action. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant mouse GPC3 and recombinant rat IGF2. Briefly,

GPC3 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to IGF2-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST and incubated for 1h with anti-GPC3 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37℃, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50 µL stop solution to the wells and read at 450/630 nm immediately. The binding activity of recombinant mouse GPC3 and recombinant rat IGF2 was shown in Figure 1, the EC50 for this effect is 0.12 ug/mL.

注意事项（Note）

For Research Use Only , Not for Diagnostic Use.