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GPC3 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP14822b

Specification

GPC3 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession P51654

GPC3 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 2719

Other Names
Glypican-3, GTR2-2, Intestinal protein OCI-5, MXR7, Secreted glypican-3, GPC3, OCI5

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GPC3 Antibody (C-term) Blocking Peptide - Protein Information

Name GPC3

Synonyms OCI5

Function
Cell surface proteoglycan (PubMed:14610063). 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 (By similarity). Binding to the hedgehog protein SHH triggers internalization of the complex by endocytosis and its subsequent lysosomal degradation (By similarity). 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 (PubMed:16227623, PubMed:24496449). Positively regulates the non-canonical Wnt signaling pathway (By similarity). 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 (By similarity). Inhibits the dipeptidyl peptidase activity of DPP4 (PubMed:17549790). Plays a role in limb patterning and skeletal development by controlling the cellular response to BMP4 (By similarity). Modulates the effects of growth factors BMP2, BMP7 and FGF7 on renal branching morphogenesis (By similarity). Required for coronary

vascular development (By similarity). Plays a role in regulating cell movements during gastrulation (By similarity).

Cellular Location
Cell membrane; Lipid-anchor, GPI-anchor {ECO:0000250|UniProtKB:P13265}; Extracellular side {ECO:0000250|UniProtKB:P13265}

Tissue Location
Detected in placenta (at protein level) (PubMed:32337544). Highly expressed in lung, liver and kidney

GPC3 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

GPC3 Antibody (C-term) Blocking Peptide - Images

GPC3 Antibody (C-term) Blocking Peptide - Background

Cell surface heparan sulfate proteoglycans are composed ofa membrane-associated protein core substituted with a variablenumber of heparan sulfate chains. Members of the glypican-relatedintegral membrane proteoglycan family (GRIPS) contain a coreprotein anchored to the cytoplasmic membrane via a glycosylphosphatidylinositol linkage. These proteins may play a role in thecontrol of cell division and growth regulation. The protein encodedby this gene can bind to and inhibit the dipeptidyl peptidaseactivity of CD26, and it can induce apoptosis in certain celltypes. Deletion mutations in this gene are associated withSimpson-Golabi-Behmel syndrome, also known as Simpson dysmorphiasyndrome. Alternative splicing results in multiple transcriptvariants.

GPC3 Antibody (C-term) Blocking Peptide - References

Lai, J.P., et al. Hepatology 52(5):1680-1689(2010)Sakurai, M., et al. Gynecol. Oncol. 119(2):332-336(2010)Zynger, D.L., et al. Histopathology 56(6):750-757(2010)Davoodi, J., et al. Proteomics 7(13):2300-2310(2007)Hsu, H.C., et al. Cancer Res. 57(22):5179-5184(1997)