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Anti-GPC3 / Glypican-3 Reference Antibody (codrituzumab)

Recombinant Antibody
Catalog # APR10154

Specification

Anti-GPC3 / Glypican-3 Reference Antibody (codrituzumab) - Product Information

Application	**FC, E, FTA**
Primary Accession	P51654
Reactivity	**Human**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**145.5 KDa**

Anti-GPC3 / Glypican-3 Reference Antibody (codrituzumab) - Additional Information

Target/Specificity
GPC3 / Glypican-3

Endotoxin
< 0.001EU/ μg,determined by LAL method.

Conjugation
Unconjugated

Expression system
CHO Cell

Format
Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

Anti-GPC3 / Glypican-3 Reference Antibody (codrituzumab) - 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}

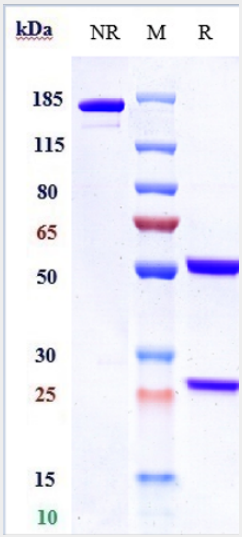
Tissue Location
Detected in placenta (at protein level) (PubMed:32337544). Highly expressed in lung, liver and kidney

Anti-GPC3 / Glypican-3 Reference Antibody (codrituzumab) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-GPC3 / Glypican-3 Reference Antibody (codrituzumab) - Images



Anti-GPC3 / Glypican-3 Reference Antibody (codrituzumab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%

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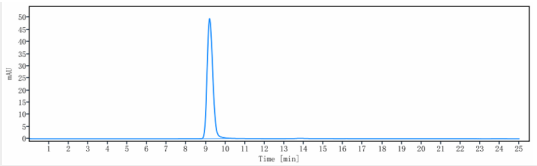
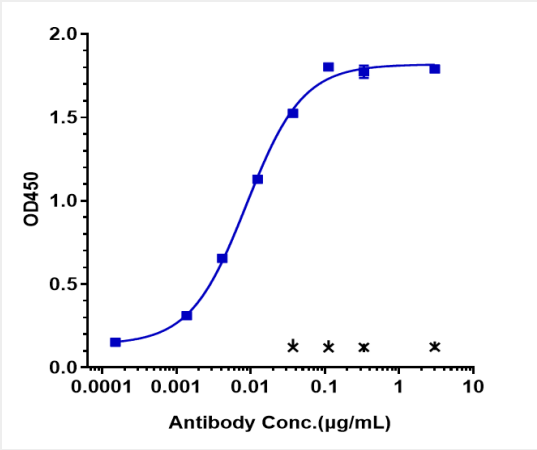
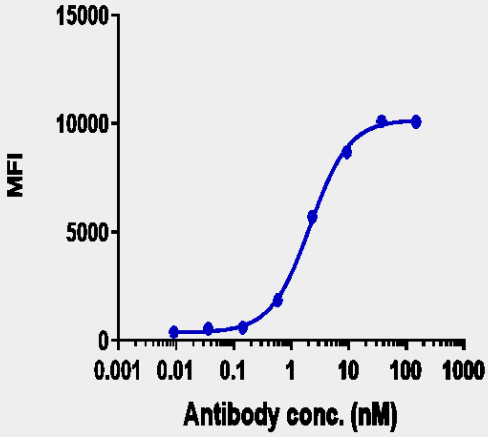


The purity of Anti-GPC3 / Glypican-3 Reference Antibody (codrituzumab)is more than 95% ,determined by SEC-HPLC.



Immobilized human GPC3, His tag at 2 μg/mL can bind Anti-GPC3 / Glypican-3 Reference Antibody (codrituzumab)EC50=0.008741 μg/mL



Human GPC3 CHOS cells were stained with Anti-GPC3 / Glypican-3 Reference Antibody (codrituzumab) and negative control protein respectively, washed and then followed by PE and analyzed with FACS, EC210=2.142 nM

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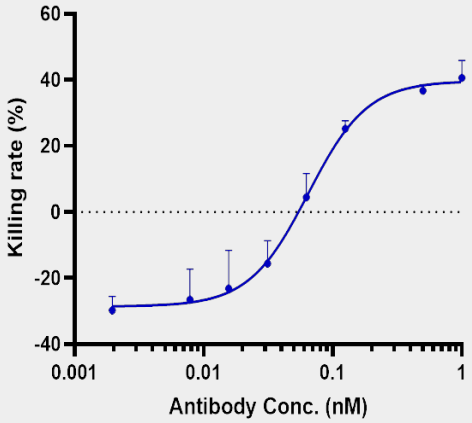
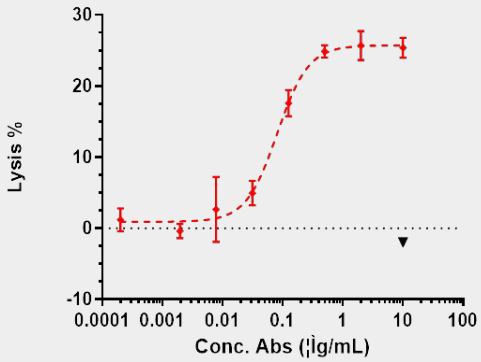


The endocytosis ratio codrituzumab by HuH-7 increased with the increase of antibody concentration, and the Internalization Rate (%) reached 40%at antibody concentration of 1 nM.



Anti-GPC3 / Glypican-3 Reference Antibody (Codrituzumab)-induced ADCC activity was evaluated using human GPC3 CHOS Cell. The max Lysis rate was approximately 30%.