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

Recombinant Antibody
Catalog # APR10154

Product Information

Application	Functional assay, Kinetics (SPR), Kinetics (BLI), FACS, E, FTA
Primary Accession	P51654
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	65563

Additional Information

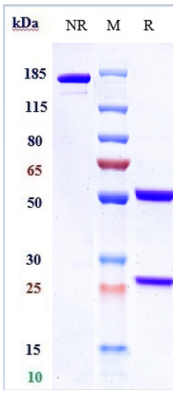
Target/Specificity	GPC3 / Glypican-3
Endotoxin Conjugation	Unconjugated
Expression system	CHO
Format	Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

Protein Information

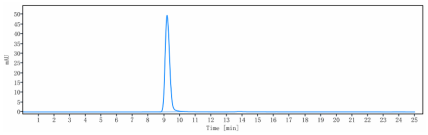
Name	GPC3
Synonyms	OCI5
Function	Cell surface proteoglycan (PubMed: 14610063). Negatively regulates the hedgehog signaling pathway when attached via the GPI- anchor to the cell surface by competing with the hedgehog receptor PTC1 for binding to hedgehog proteins (By similarity). Binding to the hedgehog 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

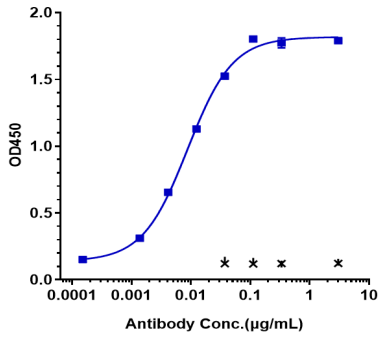
Images



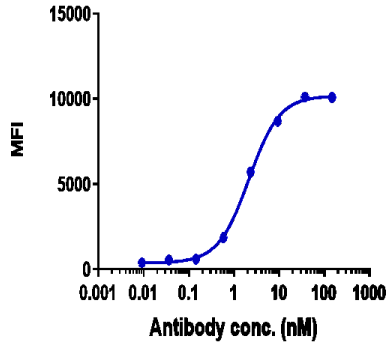
Anti-GPC3 / Glypican-3 Reference Antibody (codrituzumab) on SDS-PAGE under reducing (R) condition. The purity of the protein is greater than 95%.



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



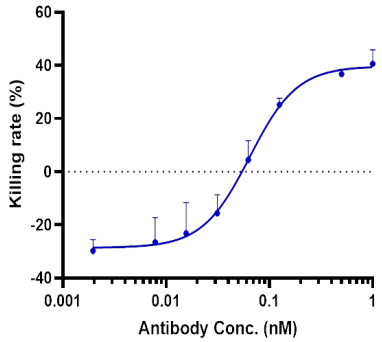
Immobilized human GPC3, His Tag at 2 ug/mL can bind Anti-GPC3 / Glypican-3 Reference Antibody (codrituzumab), EC50=0.008741 ug/mL.

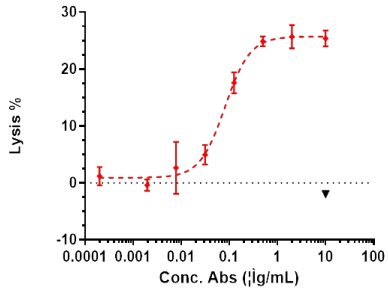


Human GPC3 CHOS cells were stained with Anti-GPC3 / Glypican-3 Reference Antibody (codrituzumab) and negative control protein respectively, washed and then followed by PE and analyzed with FACS, EC50=2.142 nM.

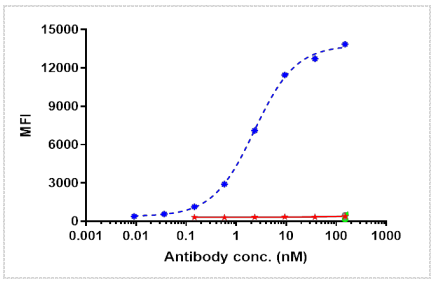
The endocytosis ratio codrituzumab by HuH-7 increased with the increase of antibody concentration, and the Internalization Rate (%) reached 40%at antibody

concentration of 1 nM.

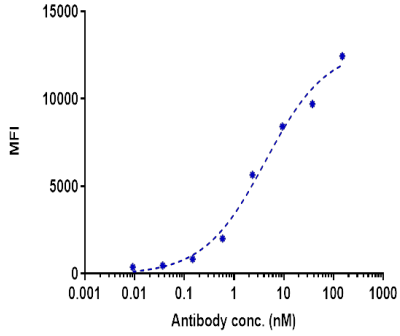




Anti-GPC3 / Glypican-3 Reference Antibody (Codrituzumab) induced ADCC activity was evaluated using human GPC3 CHOS Cell. The max Lysis rate was approximately 30%.



HEP3B 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.



HEPG2 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.