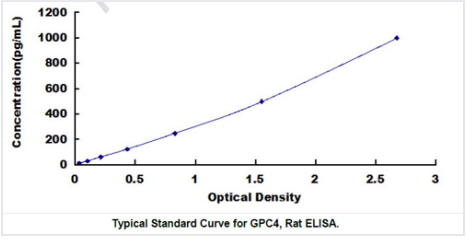
Glypican 4 (GPC4) ELISA Kit for Rat

PRODUCT OVERVIEW

Product Name	Glypican 4 (GPC4), ELISA Kit
Full Product Name	Rat Glypican 4 (GPC4) ELISA Kit
Product Gene Name	GPC4 elisa kit
Product Synonym Names	K-Glypican; Glypican Proteoglycan 4; Secreted glypican-4
Species Reactivity	Rat
Assay Type	Double-antibody Sandwich
Samples	Serum, Plasma, Tissue homogenates and other biological fluids
Detection Range	15.6-1,000pg/mL
Sensitivity	6.1pg/mL
Specificity	This assay has high sensitivity and excellent specificity for detection of Glypican 4 (GPC4). No significant cross-reactivity or interference between Glypican 4 (GPC4) and analogues was observed.
Preparation and Storage	The stability of kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition. To minimize extra influence on the performance, operation procedures and lab conditions, especially room temperature, air humidity, incubator temperature should be strictly controlled. It is also strongly suggested that the whole assay is performed by the same operator from the beginning to the end.
Molecular Weight	54,910 Da
OMIM	300168
Supply Chain Verification	Manufactured in a lab with traceable raw materials. Bulk orders can typically be prepared to the customer's specifications, please inquire.
Application	Enzyme-linked immunosorbent assay for Antigen Detection.
Intra-assay Precision (Precision within an assay)	3 samples with low, middle and high level Glypican 4 (GPC4) were tested 20 times on one plate, respectively.
Inter-assay Precision (Precision between assays)	3 samples with low, middle and high level Glypican 4 (GPC4) were tested on 3 different plates, 8 replicates in each plate.
CV(%) =	SD/meanX100
Intra-Assay	CV<10%
Inter-Assay	CV<12%
Product Categories/Family for GPC4 elisa kit	Tumor immunity; Developmental science
ISO Certification	Manufactured in an ISO 9001:2015 and ISO 13485:2016 Certified Laboratory.

Related Product Information for GPC4 elisa kit	The test principle applied in this kit is Sandwich enzyme immunoassay. The microtiter plate provided in this kit has been pre-coated with an antibody specific to Glypican 4 (GPC4). Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody specific to Glypican 4 (GPC4). Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added, only those wells that contain Glypican 4 (GPC4), biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450nm ± 10nm. The concentration of Glypican 4 (GPC4) in the samples is then determined by comparing the O.D. of the samples to the standard curve.
Other Notes	Small volumes of GPC4 elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for GPC4 purchase	MBS2024929 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Glypican 4 (GPC4) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing GPC4. The ELISA analytical biochemical technique of the MBS2024929 kit is based on GPC4 antibody-GPC4 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect GPC4 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, GPC4. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).



Typical Testing Data/Standard Curve (for reference only) of GPC4 elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for GPC4. It may not necessarily be applicable to this product.

NCBI GI #	21614525
NCBI GeneID	2239
NCBI Accession #	NP_001439.2
UniProt Secondary Accession #	Q6ZMA6; Q96L43; Q9NU08; Q9UJN1; Q9UPD9; B2R6J7; B4E2C0
UniProt Related Accession #	O75487
GenBank Nucleotide #	NM_001448.2
NCBI Official Full Name	glypican-4
NCBI Official Synonym Full Names	glypican 4
NCBI Official Symbol	GPC4
NCBI Official Synonym Symbols	K-glypican
UniProt Protein Name	Glypican-4
UniProt Synonym Protein Names	K-glypican
Protein Family	Glypican
UniProt Gene Name	GPC4
UniProt Entry Name	GPC4_HUMAN

NCBI Protein Information	glypican-4
NCBI Summary for GPC4	Cell surface heparan sulfate proteoglycans are composed of a membrane-associated protein core substituted with a variable number of heparan sulfate chains. Members of the glypican-related integral membrane proteoglycan family (GRIPS) contain a core protein anchored to the cytoplasmic membrane via a glycosyl phosphatidylinositol linkage. These proteins may play a role in the control of cell division and growth regulation. The GPC4 gene is adjacent to the 3' end of GPC3 and may also play a role in Simpson-Golabi-Behmel syndrome. [provided by RefSeq, Jul 2008]
UniProt Comments for GPC4	GPC4: Cell surface proteoglycan that bears heparan sulfate. May be involved in the development of kidney tubules and of the central nervous system. Belongs to the glypican family. Protein type: Motility/polarity/chemotaxis; Membrane protein, GPI anchor Chromosomal Location of Human Ortholog: Xq26.1 Cellular Component: proteinaceous extracellular matrix; extracellular space; lysosomal lumen; Golgi lumen; integral to plasma membrane; plasma membrane; nucleus; external side of plasma membrane Molecular Function: heparan sulfate proteoglycan binding Biological Process: chondroitin sulfate metabolic process; glycosaminoglycan biosynthetic process; cell proliferation; phototransduction, visible light; anatomical structure morphogenesis; glycosaminoglycan catabolic process; glycosaminoglycan metabolic process; carbohydrate metabolic process; pathogenesis; retinoid metabolic process Disease: Simpson-golabi-behmel Syndrome, Type 1; Wilms Tumor 1
Research Articles on GPC4	**1.** Data suggest gender difference in circulating GPC4 levels in nonalcoholic fatty liver disease; GPC4 levels in women appear to correlate with cardiometabolic risk factors (adiposity/body fat distribution, insulin resistance, and arterial stiffness).
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