Human platelet membrane glycoprotein ?,GP-? ELISA Kit

Product Code	CSB-E10117h
Abbreviation	CD36
Protein Biological Process 1	Cell Adhesion
Target Name	CD36 molecule (thrombospondin receptor)
Uniprot No.	P16671
Alias	CHDS7, FAT, GP3B, GP4, GPIV, PASIV, SCARB3, CD36 antigen|CD36 antigen (collagen type I receptor, thrombospondin receptor)|OTTHUMP00000207872|OTTHUMP00000207874|PAS-4 protein|cluster determinant 36|platelet membrane glycoprotein ?,GP-?|platelet membrane glycoprotein 4,GP-4
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Cell adhesion
Sample Types	serum, plasma, tissue homogenates
Detection Range	2.5 ng/mL-160 ng/mL
Sensitivity	0.625 ng/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Immunology
Gene Names	CD36
Tag Info	quantitative
Protein Description	Sandwich
Description	This human GP-IV ELISA kit employs the quantitative sandwich enzyme immunoassay technique to measure the levels of human GP-IV in multiple samples, including serum, plasma, or tissue homogenates. Antibody specific for GP-IV has been pre-coated onto the microplate. Standards and samples are pipetted into the wells and any GP-IV present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated GP-IV antibody is added to the wells. After washing, avidin conjugated HRP is added

to the wells, forming an antibody-antigen-enzyme-labeled antibody complex. Following a wash to remove any unbound HRP-avidin, the TMB substrate solution is added to the wells, and the color develops into blue. The color changes from blue to yellow after the addition of stop solution into the wells. The color intensity is in proportion to the amount of GP-IV bound in the initial step.

GP-IV, also called CD36, is a scavenger receptor that plays a role in myocardial tissue uptake of long-chain fatty acids (FAs) and contributes to lipid accumulation and metabolic dysfunction when fat supply is excessive. CD36 is involved in immune modulation, metabolic regulation, and other pathophysiological processes. In renal tubular epithelial cells, CD36 promotes the uptake of AOPPs, resulting in lipotoxicity and renal tubule interstitial fibrosis in diabetic nephropathy. CD36 is related to platelet activation on the platelet. It is decreased in ischemia-reperfusion and pressure overload-caused cardiac hypertrophy but increased in diabetic cardiomyopathy and atherosclerosis.

Target Details

This protein is the fourth major glycoprotein of the platelet surface and serves as a receptor for thrombospondin in platelets and various cell lines. Since thrombospondins are widely distributed proteins involved in a variety of adhesive processes, this protein may have important functions as a cell adhesion molecule. It binds to collagen, thrombospondin, anionic phospholipids and oxidized LDL. It directly mediates cytoadherence of Plasmodium falciparum parasitized erythrocytes and it binds long chain fatty acids and may function in the transport and/or as a regulator of fatty acid transport. Mutations in this gene cause platelet glycoprotein deficiency. Multiple alternatively spliced transcript variants encoding the same protein have been found for this gene.

Product Precision

Intra-assay Precision (Precision within an assay): CV%<8%
Three samples of known concentration were tested twenty times on one plate to assess.
Inter-assay Precision (Precision between assays): CV%<10%
Three samples of known concentration were tested in twenty assays to assess.

Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of human GP-? in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

?	Sample	Serum(n=4)
1:1	Average %	90
	Range %	86-94
1:2	Average %	104
	Range %	98-107
1:4	Average %	91
	Range %	85-97
1:8	Average %	97
	Range %	91-101

Recovery

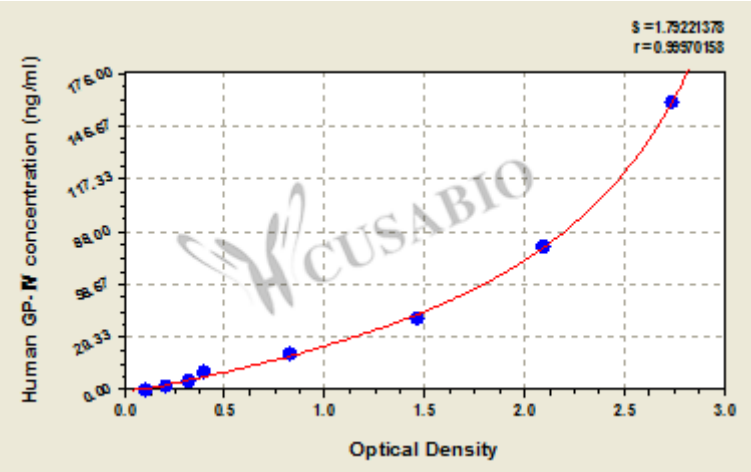
The recovery of human GP-? spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range

Serum (n=5)	94	90-98
EDTA plasma (n=4)	97	93-99

Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



ng/ml	OD1	OD2	Average	Corrected
160	2.783	2.777	2.780	2.663
80	2.134	2.117	2.126	2.009
40	1.496	1.478	1.487	1.370
20	0.855	0.837	0.846	0.729
10	0.417	0.404	0.411	0.294
5	0.321	0.334	0.328	0.211
2.5	0.225	0.216	0.221	0.104
0	0.118	0.116	0.117	?

Msds

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