

Bioactive

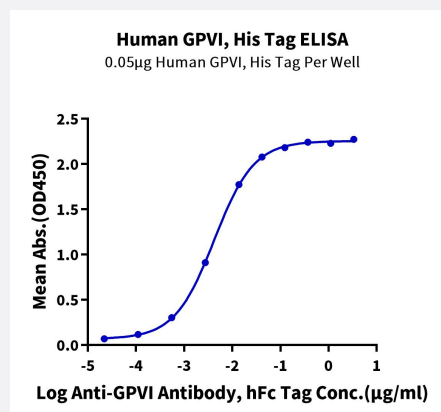
HuPro®

GP6 (Human) Recombinant Protein

Catalog # P9863

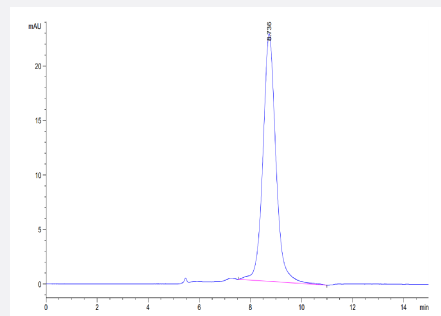
Size 100 ug

Applications



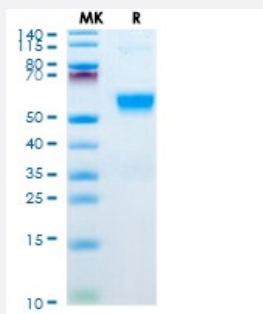
Enzyme-linked Immunoabsorbent Assay

Immobilized Human GPVI, His Tag at 0.5 ug/mL (100 uL/Well) on the plate. Dose response curve for Anti-GPVI Antibody, hFc Tag with the EC50 of 4.2 ng/mL determined by ELISA.



SEC-HPLC

The purity of Human GPVI is greater than 95% as determined by SEC-HPLC.



Tris-Bis PAGE

Human GPVI on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

Specification

Product Description	Human GP6 (Q9HCN6-1, Gln21-Lys267) partial recombinant protein with His tag at C-Terminus expressed in HEK293 cells.
Sequence	Gln21-Lys267
Host	Human
Theoretical MW (kDa)	28
Form	Lyophilized
Preparation Method	Mammalian cell (HEK293) expression system
Purity	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin Level	< 1 EU per 1 ug of protein (determined by LAL method)
Activity	The EC ₅₀ was 4.2 ng/mL, measured by ELISA at 0.5 ug/mL.
Quality Control Testing	SEC-HPLC and Tris-Bis PAGE SEC-HPLC The purity of Human GPVI is greater than 95% as determined by SEC-HPLC. Tris-Bis PAGE Human GPVI on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.
Recommend Usage	Biological Activity ELISA SDS-PAGE The optimal working dilution should be determined by the end user.
Storage Buffer	Lyophilized from sterile distilled Water is > 100 ug/mL
Storage Instruction	Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Result of bioactivity analysis

Applications

- Enzyme-linked Immunoabsorbent Assay

Immobilized Human GPVI, His Tag at 0.5 ug/mL (100 uL/Well) on the plate. Dose response curve for Anti-GPVI Antibody, hFc Tag with the EC₅₀ of 4.2 ng/mL determined by ELISA.

- Functional Study

- SDS-PAGE

Gene Info — GP6

Entrez GeneID [51206](#)

Protein Accession# [Q9HCN6-1](#)

Gene Name GP6

Gene Alias GPV, GPVI, MGC138168

Gene Description glycoprotein VI (platelet)

Omim ID [605546](#)

Gene Ontology [Hyperlink](#)

Gene Summary

Glycoprotein VI (GP6) is a 58-kD platelet membrane glycoprotein that plays a crucial role in the collagen-induced activation and aggregation of platelets. Upon injury to the vessel wall and subsequent damage to the endothelial lining, exposure of the subendothelial matrix to blood flow results in deposition of platelets. Collagen fibers are the most thrombogenic macromolecular components of the extracellular matrix, with collagen types I, III, and VI being the major forms found in blood vessels. Platelet interaction with collagen occurs as a 2-step procedure: (1) the initial adhesion to collagen is followed by (2) an activation step leading to platelet secretion, recruitment of additional platelets, and aggregation. In physiologic conditions, the resulting platelet plug is the initial hemostatic event limiting blood loss. However, exposure of collagen after rupture of atherosclerotic plaques is a major stimulus of thrombus formation associated with myocardial infarction or stroke (Jandrot-Perrus et al., 2000 [PubMed 10961879]).[supplied by OMIM]

Other Designations platelet collagen receptor|platelet glycoprotein VI

Pathway

- [ECM-receptor interaction](#)

Disease

- [Atherosclerosis](#)
- [Brain Infarction](#)
- [Brain Ischemia](#)
- [Cardiovascular Diseases](#)
- [Carotid Stenosis](#)

- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Coronary Thrombosis](#)
- [Death](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Ductus Arteriosus](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Glomerulonephritis](#)
- [Hemorrhage](#)
- [Infant](#)
- [Kidney Failure](#)
- [Myocardial Infarction](#)
- [Stroke](#)
- [Thrombosis](#)
- [Tobacco Use Disorder](#)
- [Vascular Diseases](#)