

Product datasheet for **TP726689**

Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant Mouse GPVI (C-6His)
Species:	Mouse
Expression cDNA Clone or AA Sequence:	Gln22-Lys265
Tag:	C-6His
Buffer:	Lyophilized from a 0.2 um filtered solution of PBS, pH7.4.
Note:	Recombinant Mouse Glycoprotein 6 is produced by our Mammalian expression system and the target gene encoding Gln22-Lys265 is expressed with a 6His tag at the C-terminus.
Storage:	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Stability:	12 months from date of despatch
Synonyms:	Glycoprotein 6; glycoprotein VI (platelet); GP6; GPIV; GPVI; GPVIplatelet collagen receptor; MGC138168; platelet glycoprotein VI



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Summary:

Glycoprotein VI (GPVI) is a 63 kDa platelet/megakaryocyte-specific type I transmembrane glycoprotein of the immunoglobulin superfamily that is an important collagen receptor and initiator of platelet activation, aggregation and thrombin generation. GPVI is also a secondary receptor required for platelet spreading on laminin. GPVI associates with the Fc receptor gamma -chain via charged aa in the TM domains of GPVI (arginine) and the FcR gamma (aspartic acid). Collagen binding by the GPVI Ig-like domains initiates signaling through the FcR gamma ITAM sequence. Dimerization of GPVI (2:2 with FcR gamma) and N-glycosylation greatly enhances collagen binding. Type I and III collagens are strong thrombus-forming components in the vascular subendothelium and atherosclerotic plaques. GPVI initiates binding to fibrillar collagens under flow conditions, then activates integrin alpha 2 beta 1 which binds collagen more tightly. GPVI deficiencies cause only a mild bleeding tendency, probably because integrin alpha 2 beta 1 is able to minimally initiate collagen binding. Normal human GPVI concentration can vary widely and affect maximum thrombin generation. Engagement of GPVI by collagens or other agonists, including autoantibodies, causes calmodulin-regulated metalloproteinase cleavage of the 57 kDa ECD and depletes surface GPVI.