Supporting Information

Table S1. Information of the main chemicals used.

Chemical names	Source	Catalog No. (CAT#)
Collagen	Chrono-Log Corp.	385
ADP	Sigma Aldrich	A2754
thrombin	Sigma Aldrich	T7009
PAF	Sigma Aldrich	511075
SQ22536	Sigma Aldrich	HY-100396
TRAP (AYPGKF-NH2)	Peptides International	PAR-3674-PI
cAMP ELISA kit	Cayman Chemicals	58100
FITC-conjugated CD62P antibody	eBiosciences	MA5-16428
FITC-conjugated CD63 antibody	eBiosciences	MA1-19602
FITC-conjugated CD40L antibody	eBiosciences	11-1548-42
FITC-conjugated PAC-1	eBiosciences	MA5-28564
Alexa Fluor^{TM} 488-conjugated fibrinogen	Thermo Fisher Scientific	F13191
p-VASP^{Ser157} antibody	Cell Signaling Technology	84519
β-actin antibody	Cell Signaling Technology	3700
GAPDH antibody	Cell Signaling Technology	5174
p-PKA substrate antibody	Cell Signaling Technology	9624
p-Erk1/2$^{Thr202/Tyr204}$ antibody	Cell Signaling Technology	4370
p-Akt^{Ser473} antibody	Cell Signaling Technology	4060
p-integrin β3^{Tyr773} antibody	ImmunoWay Biotechnology Company	YP0144
Cangrelor	Selleck Chemical	S3737
740 Y-P	Selleck Chemical	S7865
CytoPainter Phalloidin-ifluor 488	Abcam	ab176753
H89	Abcam	ab143787
LDH detection kit^{PLUS}	Roche Applied Science	04744926001

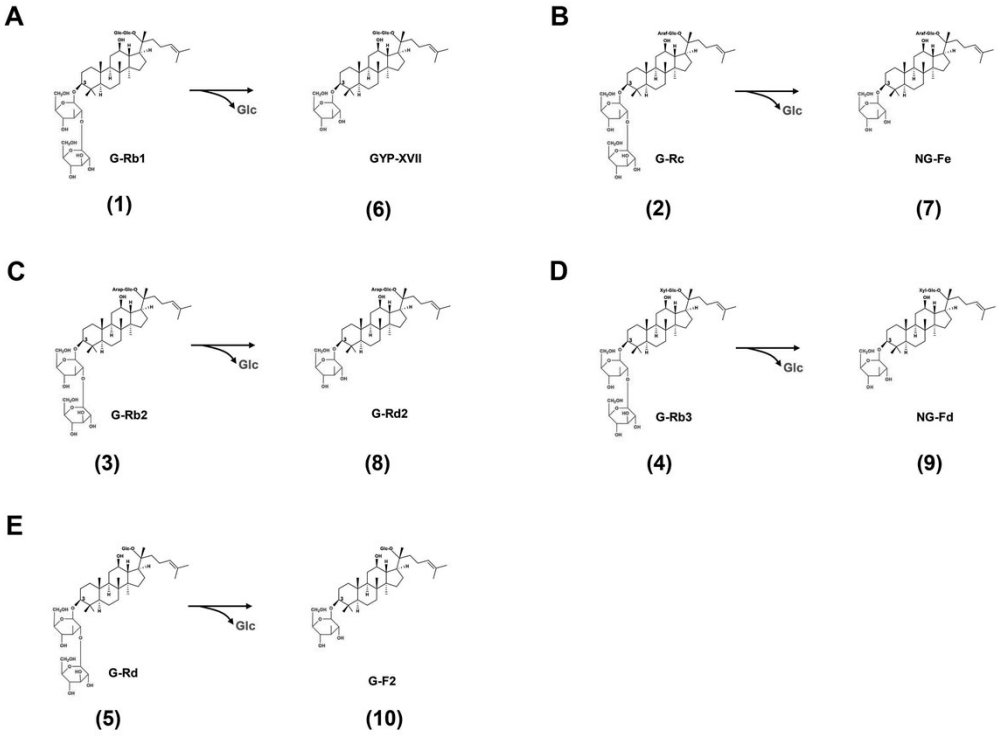

Figure S1. Chemical structures of 10 saponins in *Panax notoginseng* flowers (PNF). The major saponins of PNF (left), compounds **(1)-(5)**, can be transformed to minor saponins of PNF (right), compounds **(6)-(10)**, respectively, by selectively cleaving the β-(1→2)-glucosidic linkage at position C-3 of ginsenosides, when PNF is extracted by water. G, Ginsenoside; GYP, Gypenoside; NG, Notoginsenoside; Glc, β-D-glucose.

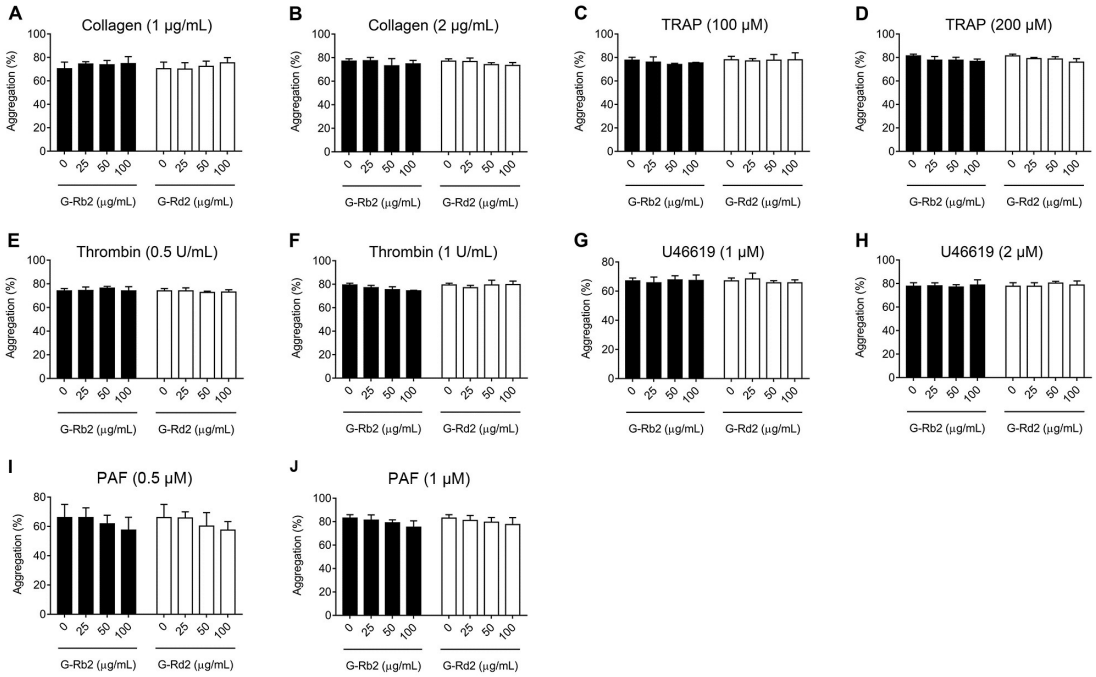

Figure S2. G-Rb2 and G-Rd2 do not affect platelet aggregation in response to collagen, TRAP, thrombin, U46619, or PAF in human platelets *in vitro*. Human PRP were pre-incubated with various concentrations (25, 50, or 100 μg/mL) of G-Rb2 or G-Rd2 or the vehicle control for 40 min. Platelet aggregation was stimulated by 1 μg/mL collagen **(A)**, 2 μg/mL collagen **(B)**, 100 μM thrombin receptor activating peptide (TRAP) **(C)**, 200 μM TRAP **(D)**, 0.5 U/mL thrombin **(E)**, 1 U/mL thrombin **(F)**, 1 μM U46619 **(G)**, or 2 μM U46619 **(H)**, 0.5 μM PAF **(I)**, or 1 μM PAF **(J)**. Data was presented as mean ± SD (n=6). Statistical significance was analyzed by a one-way ANOVA followed by Dunnett's *t*-test. No significant differences were observed between the vehicle control and G-Rb2 or G-Rd2.

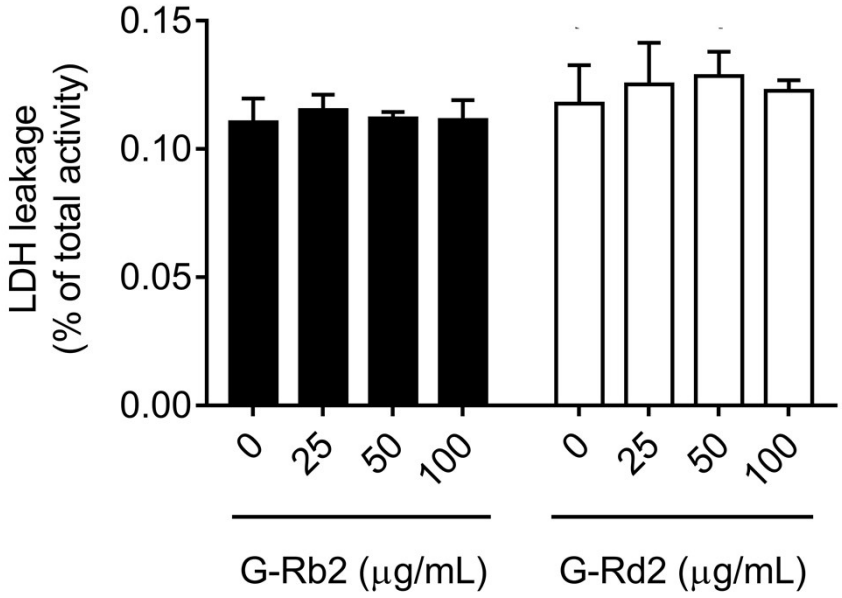

Figure S3. G-Rb2 and G-Rd2 do not exert cytotoxic effect on human platelets *in vitro*. Human PRP were pre-incubated with various concentrations (25, 50, or 100 μg/mL) of G-Rb2 or G-Rd2 or the vehicle control for 40 min. The leakage of lactate dehydrogenase (LDH) from platelets was measured to evaluate the cytotoxic effect of G-Rb2 and G-Rd2. The extent of LDH leakage was expressed as % of total enzyme activity measured in platelets completely lysed with 10% sodium dodecyl sulphate (SDS; positive control). Data was presented as mean ± SD (n=5). Statistical significance was analyzed by a one-way ANOVA followed by Dunnett's *t*-test. No significant differences were observed between the vehicle control and G-Rb2 or G-Rd2.