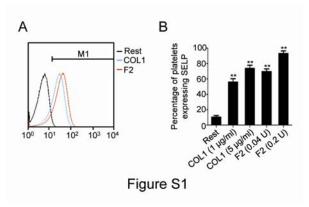
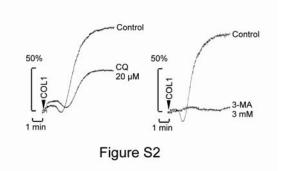
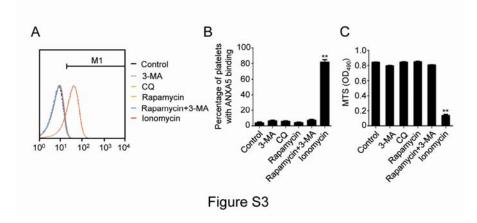
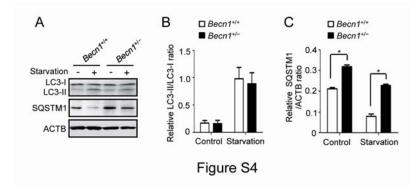
## Supplemental information









## **Figure legends**

**Figure S1.** Expression of SELP [selectin P (granule membrane protein 140kDa, antigen CD62)] on platelet surface. (**A**) Human platelets treated with COL1 (1  $\mu$ g/ml) or F2/thrombin (0.04 U) for 10 min were incubated with FITC-conjugatedanti-CD62P and analyzed by flow cytometry. Representative histogram was shown. (**B**) Quantification of SELP expression on the surface of platelet. Results are shown as mean  $\pm$  SEM percentage of platelets with positive SELP staining from 3 independent experiments. \*\**P*<0.01.

**Figure S2.** Blocking autophagic degradation inhibits platelet aggregation in PRP. Normal human PRP ( $300 \times 10^6$  platelets/ml) was pretreated with 3-MA or CQ at the indicated concentrations for 1.5 h. Then COL1 (1 µg/ml) was added and the aggregation was recorded using an aggregometer.

**Figure S3.** Effect of autophagy disruption on platelet viability. (**A**) Human platelets were treated with 3 mM 3-MA, 20  $\mu$ M CQ or 3  $\mu$ M ionomycin for 1.5 h, 200 nM rapamycin with or without 3-MA for 2 h. Then the platelets were incubated with FITC-conjugated ANXA5 and analyzed by flow cytometry. Representative histogram was shown. (**B**) Quantification of ANXA5-positive platelets. Results are shown as mean  $\pm$  SEM from 3 independent experiments. \*\**P*<0.01. (**C**) Platelets were treated as in (**A**) and tested by MTS assay. Results are shown as mean  $\pm$  SEM from 3 independent experiments. \*\**P*<0.01.

Figure S4. Impaired autophagy in *Becn1*-deficient platelets. (A) Fresh platelets isolated form  $Becn1^{+/+}$  or  $Becn1^{+/-}$  mice were starved and subjected to western blot

analysis with anti-SQSTM1 and anti-LC3 antibodies. (**B** and **C**) Statistical analysis of LC3-II/LC3-I ratio (**B**) and SQSTM1/ACTB ratio (**C**). Results are shown as mean  $\pm$  SEM from 3 independent experiments. \**P*<0.05.