

Supplementary Figure 1

The effect of platelet number on aggregation count. Platelets aggregation obtained from healthy volunteers were measured in a Born-lumiaggregometer in platelet rich plasma as described in the methods. The range of the platelet count was between $2-3 \times 10^8$ /ml (white) and $5-6 \times 10^8$ /ml (black). Aggregation results, shown as % increase in light transmission, was measured at 180 sec after agonist addition. Results are shown as mean \pm SEM (n=5).

Supplementary Figure 2

(A&B): ATP secretion (nmol) in platelet rich plasma (PRP) from 70 healthy volunteers in response to PAR1 peptide SFLLRN ($100 \mu\text{M}$). (2A) without normalization of platelets count to 1×10^8 /ml. (2B) with normalization of ATP secretion to 1×10^8 /ml. r^2 is the correlation co-efficient which is a measure of the strength of the linear relationship between two variables that is defined in terms of the (sample) covariance of the variables divided by their (sample) standard deviations.

Supplementary Figure 3

The participants cohort, number, median age and gender.

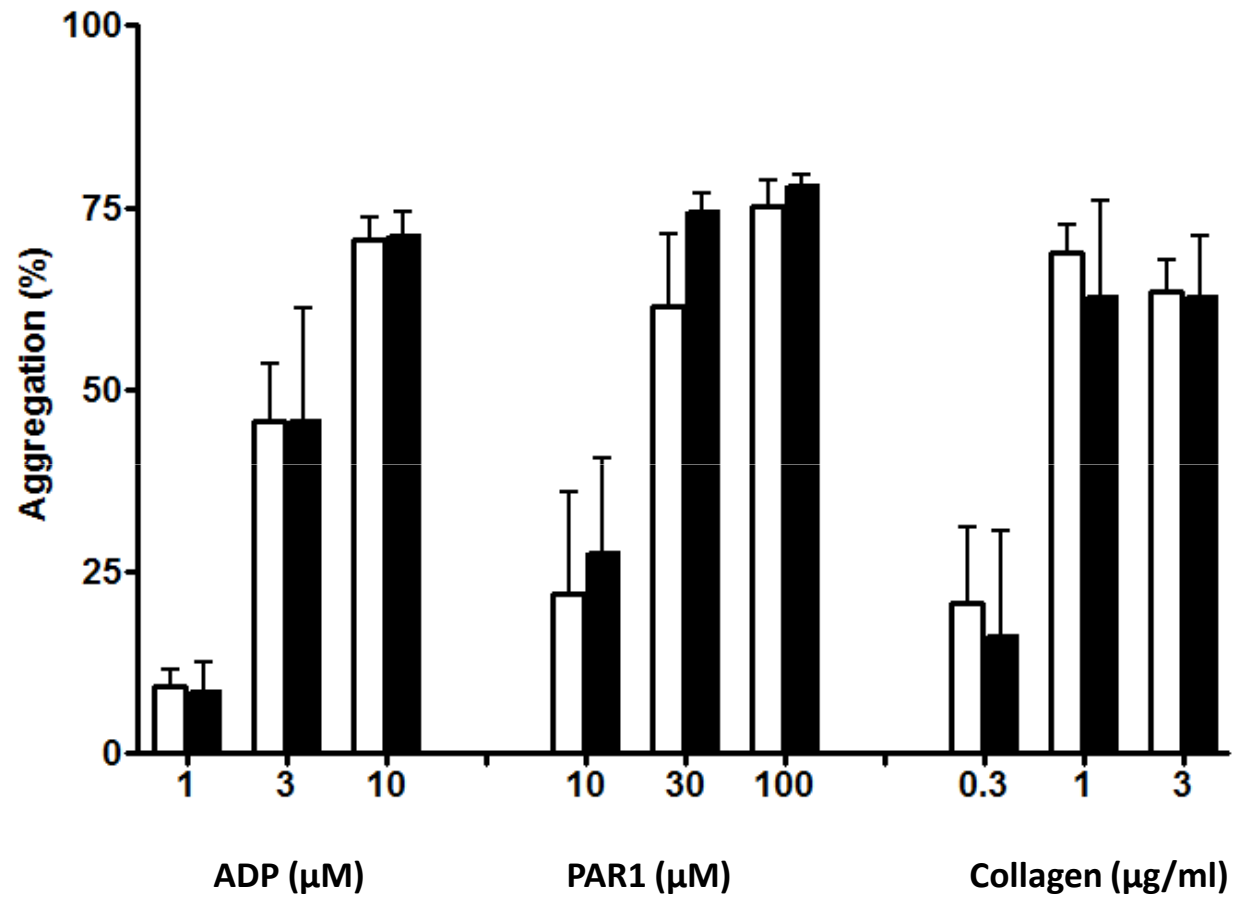
Supplementary Figure 4

The effect of ADP and adrenaline on PGE1-stimulated cAMP formation in the participant with homozygous P2Y₁₂ mutation. Washed platelets from a healthy volunteer (control) and the participant with homozygous P2Y₁₂ mutation were incubated for 15 min with $1 \mu\text{M}$ PGE1 in the absence or presence of ADP ($20 \mu\text{M}$) or adrenaline ($20 \mu\text{M}$). Initial values were obtained from PGE1-stimulated platelets and results following agonist stimulation are expressed as percentages of the initial values. n=1

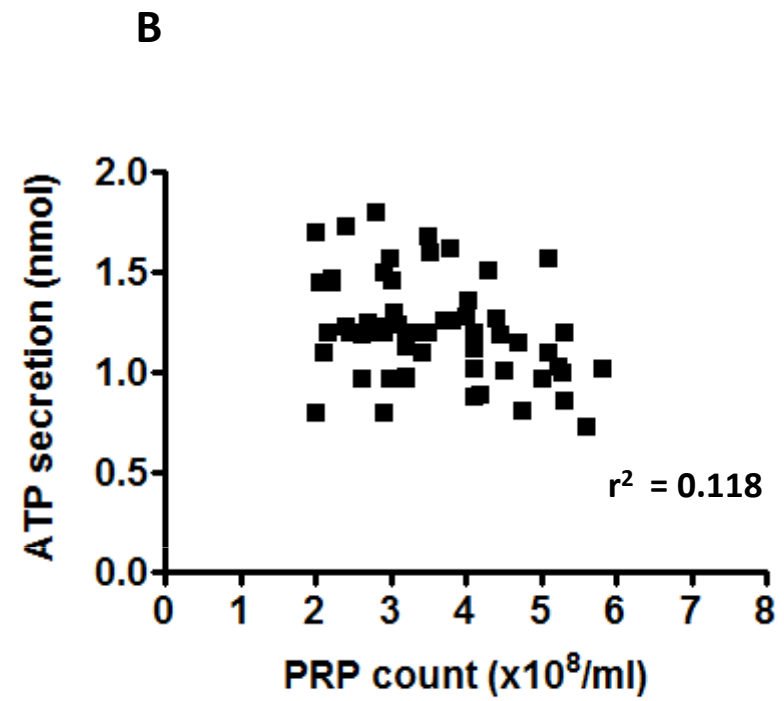
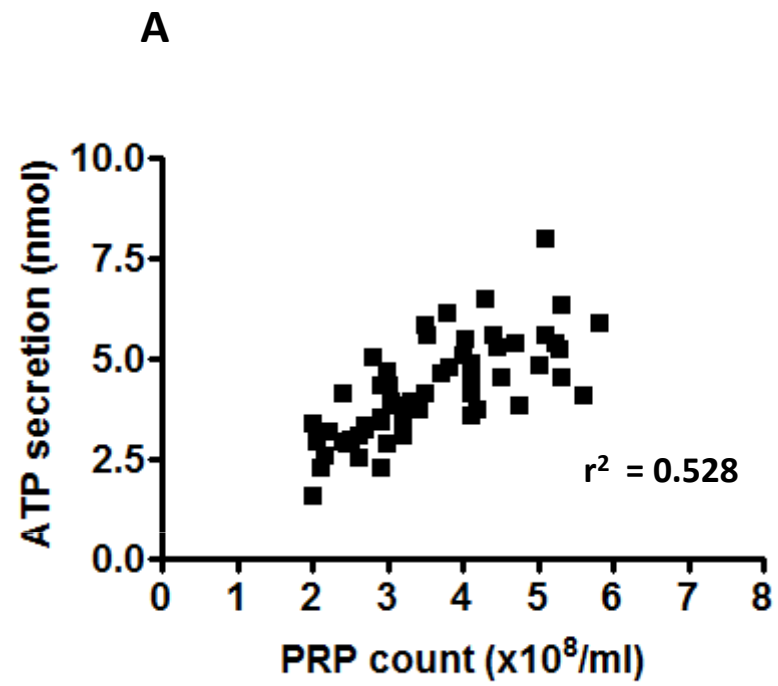
Supplementary Figure 5

Aggregation in a participant diagnosed with a Gq-like defect. Aggregation and ATP secretion were measured in a Born-lumiaggregometer in platelet rich plasma in the presence of chronolume reagent. The results are shown as % increase in light transmission relative to platelet-poor plasma or as the amount of secreted ATP, respectively Aggregation in a control and a participant with Gq like-defect. p: participant c: control (healthy volunteer).

S-Figure 1

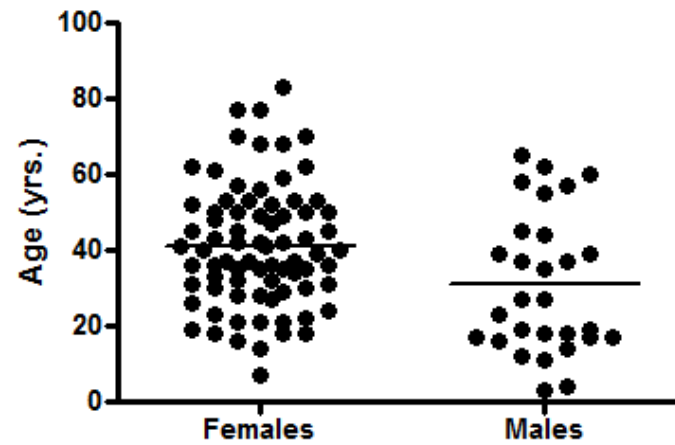


S-Figure 2

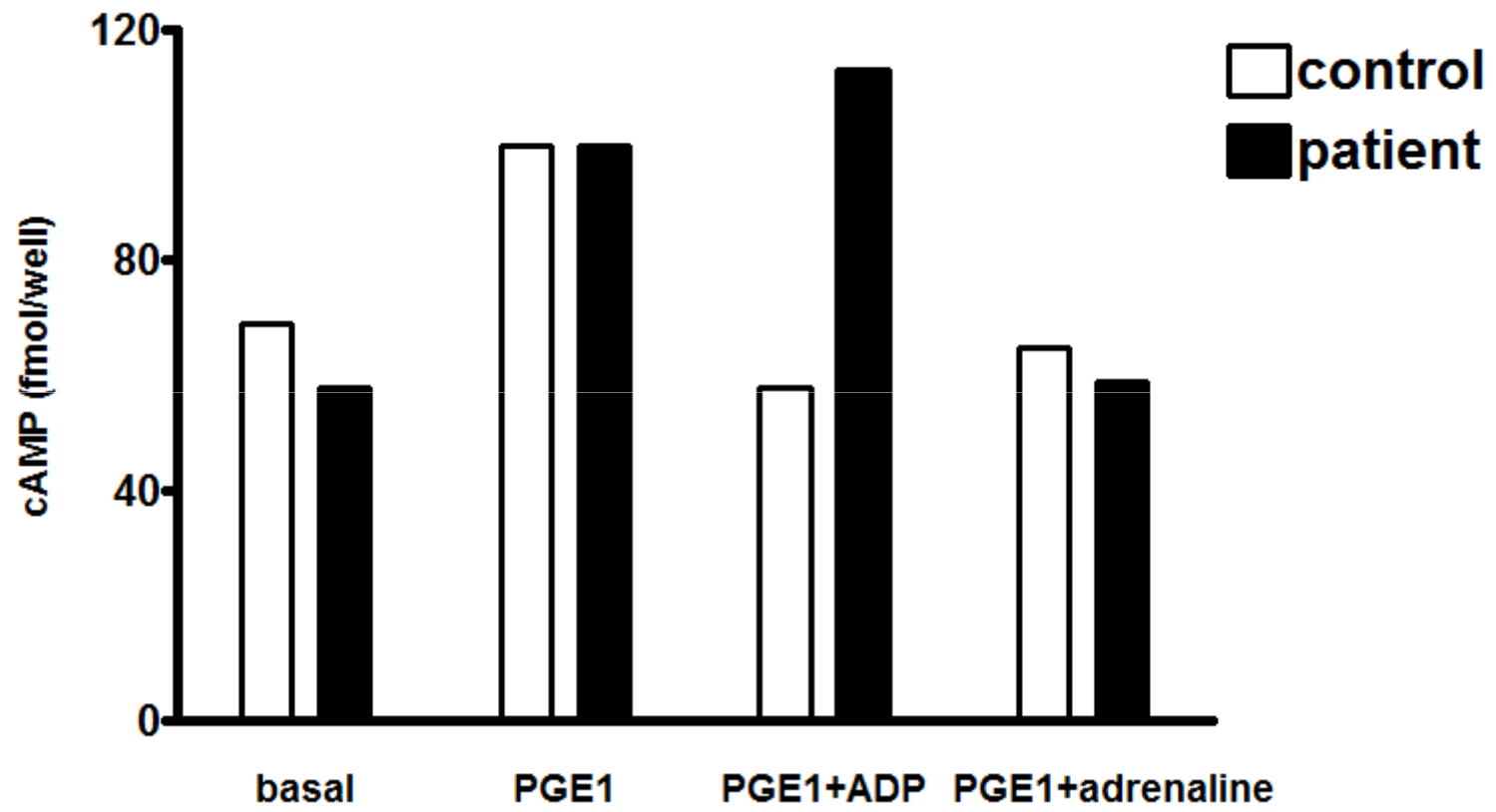


S-Figure 3

	No defect	Defect	Median age
No. of females	38	43	40
No. of males	9	21	25



S-Figure 4



S-Figure 5

