**Figure S1: Main characteristics of the chimeric monoclonal antibody 5B9**

5B9 has been obtained after immunization of transgenic Gammaprim mice (B-Cell design) with purified human PF4 (Hyphen Biomed) and unfractioned heparin. 5B9 is composed of two murine light chains and two chimeric heavy chains, each having a murine variable region and a human constant region.

**Panel A.** The reactivity of 5B9 against PF4 alone or PF4/heparin complexes was evaluated using an homemade ELISA adapted from Arepally et al (Blood, 5:1533-40, 2000). Briefly, purified human PF4 (2.5 µg/mL, Hyphen Biomed) was coated without or with 0.05 IU/mL of heparin. 5B9 (20 µg/mL), or control plasma (without anti-PF4/H antibodies) or HIT plasma, was then incubated and absorbance read at 405 nm (A405).

**Panels B and C.** Representative platelet aggregation profile with washed platelets (WP) (B) and platelet-rich plasma (PRP) (C) after addition of 5B9 (36 µg/mL) in the absence or presence of heparin (0.5 or 10 IU/mL). The inhibitory effect of moAb IV.3 antibody (10 µg/mL) was also evaluated to check that platelet aggregation was FcγRIIA-dependent.

**Figure S2:** Mean relative increase in TF mRNA level (± 1 SEM) measured after addition of HIT plasma and heparin (0.5 IU/mL) in whole blood from 5 donors heterozygous for the FcγRIIA H/R131 polymorphism, with or without IV.3 (10µg/mL). p value was calculated using the paired t-test.

**Figure S3:** Serum levels of total IgG, and IgG1, IgG2, IgG3, IgG4 subclasses in 59 healthy donors (Panel A) and in 42 HIT patients (Panel B) for whom serum samples were available. Serum levels of total IgG and subclasses of IgG were measured with the BNII COMBI kit (Binding site).
Figure S4: Influence of normal polyvalent IgG and human monoclonal IgG1 or IgG2 on platelet aggregation induced by collagen in relation to FcγRIIA H131R polymorphism. Mean lag times (± 1 SEM) measured after addition of collagen (1 µg/mL) to PRP, washed platelet (WP) and IgG-depleted PRP from RR and HH donors (Panel A). The effect of polyclonal normal IgG (5 mg/mL), human monoclonal IgG1 (4 mg/mL) or IgG2 (4 mg/mL) on the platelet response to collagen was also evaluated (Panel B).

Figure S5: Platelet aggregation curves obtained with PRP and WP from RR (n=2) and HH donors (n=2). PAT were performed with HIT plasma and heparin (0.5 IU/mL). Washed platelets (WP) were tested with HIT plasma and heparin in the presence or absence of polyclonal IgG (5 mg/mL) or monoclonal IgG1 (4 mg/mL) or IgG2 (4 mg/mL).
Figure S1

A

![Bar chart showing A405 values for PF4 and PF4/H in 5B9, Control plasma, and HIT plasma.](image)

B

![Graph showing aggregation (%) over time for WP with Hep 0.5 IU/mL, Hep 0.5 IU/mL + IV.3 10 µg/mL, Hep 0 IU/mL, and Hep 10 IU/mL in 5B9.](image)

C

![Graph showing aggregation (%) over time for PRP with Hep 0.5 IU/mL, Hep 0.5 IU/mL + IV.3 10 µg/mL, Hep 0 IU/mL, and Hep 10 IU/mL in 5B9.](image)
Figure S2

![Graph showing relative increase in TF mRNA level (n-fold)](image)

- Relative increase in TF mRNA level (n-fold)
- HIT plasma + +
- Heparin (0.5 IU/mL) + +
- IV.3 (10 µg/mL) - +

*Heparin (0.5 IU/mL) and IV.3 (10 µg/mL) increase TF mRNA levels compared to HIT plasma, with p = 0.015.*
Figure S3

A

B
Figure S4

A

![Graph A](image)

B

![Graph B](image)
Figure S5

RR

Aggregation (%)

HIT plasma + heparin (0.5 IU/mL)

120 sec

PRP

WP

IgG2

IgG

IgG1

HH

Aggregation (%)

HIT plasma + heparin (0.5 IU/mL)

120 sec

PRP

WP

IgG2

IgG1

IgG