### New Product Highlights

**GR 144053:** Non-peptide antagonist of the platelet glycoprotein Ib/IIa (GP Ib/IIa) fibrinogen receptor

Following vascular injury, platelets become activated and adhere to damaged blood vessel walls and exposed subendothelial connective tissues thereby forming the initial platelet plug. Platelets play a central role in thrombus formation and are known to participate in many life-threatening thrombotic disorders such as acute myocardial infarction, stroke and pulmonary embolism. One platelet receptor involved in this activation is glycoprotein Ib/IX (GP Ib/IX) together with its ligand von Willebrand factor (vWF). The molecular mechanism of the activation and degranulation both in vivo and in vitro and inhibits ADP-induced platelet aggregation with an IC\textsubscript{50} value of 17.7 nM [2].

GR 144053 also suppresses the activation of platelets by aurantricarboxylic acid (ATA, Prod. No. A0885) [2]. The molecular mechanism of ATA action has not been completely elucidated. One possible mechanism is through its binding to GP Ib, thereby blocking binding of vWF. This observation suggests additional activities for GR 144053 that are not mediated by the GP Ib/IIa receptor [2].

GR 144053 is a useful tool for studying the mechanisms of platelet activation and degranulation events. Currently, anti-thrombotic therapy includes anti-platelet, anti-coagulant, pro-thrombotic or pro-fibrinolytic agents. GR 144053 may be potentially useful in achieving anti-thrombosis effects while maintaining the integrity of the vascular system.

**Sold for research purposes under agreement from GlaxoSmithKline.**

### References