

Supporting Info

Electrochemical Measurement of Endogenous Serotonin Release from Human Blood Platelets

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Supporting Materials included:

Figure S-1. Ca^{2+} -dependence of thrombin-stimulated serotonin release from human platelets

Figure S-2. Serotonin release from concentrated HPS platelets

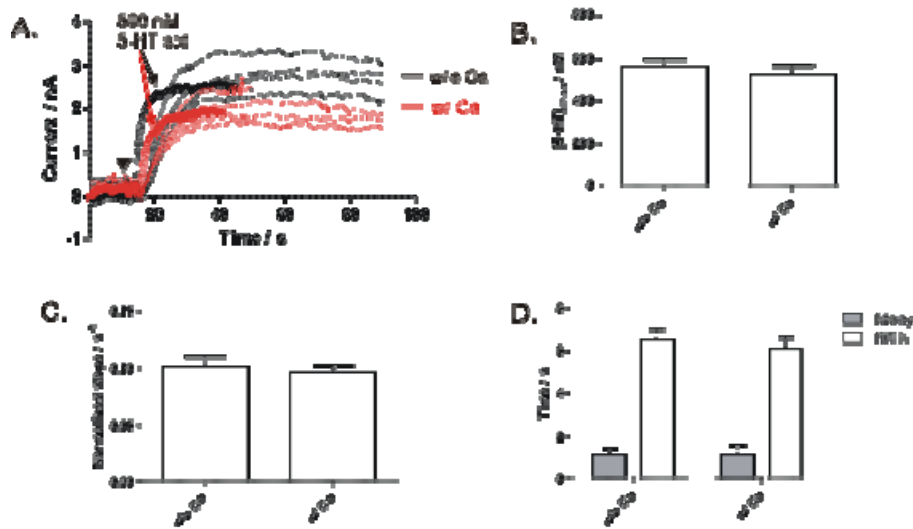
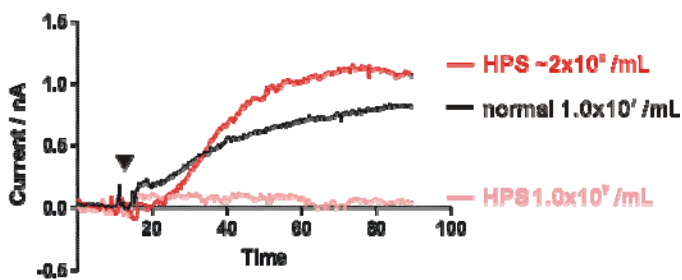


Figure S-1. Ca²⁺-dependence of thrombin-stimulated serotonin release from human platelets (A) Serotonin release was measured from platelets stimulated with thrombin (4 U/mL, symbol ▼) in the presence or absence of 2.0 mM Ca²⁺. Ca²⁺ was added to Ca²⁺-free platelet suspension ~1 min prior to thrombin stimulation. The post-calibration of the electrode is also shown by the open symbols. The electrode response to serotonin was slightly suppressed in the presence of di-cations, a known behavior of carbon-fiber microelectrodes.¹ (B-D) The amount and time course of thrombin-stimulated serotonin release were not altered by the extracellular Ca²⁺. Experiments were performed at 37 ± 1 °C. N=4 and p>0.05 using unpaired Student's t-test.



SI Figure S-2. Serotonin release from concentrated HPS platelets Measurements of serotonin release from diluted normal and HPS platelets show robust response and no detectable signal, respectively; however, detectable serotonin release could be measured from highly concentrated HPS platelet suspension in two out of four HPS platelet samples that were tested. This experiment was performed at room temperature.

Reference

- 1 Chen, B. T.; Rice, M. E. *Electroanalysis*. **1999**, *11*, 344-348