Supporting Information for

Characterization of the presence and function of platelet opioid receptors

Sarah M. Gruba,^{1,2} Danielle H. Francis,² Audrey F. Meyer,^{2,3} Eleni Spanolios,² Jiayi He,² Ben M. Meyer,² Donghyuk Kim,² Kang Xiong-Hang,² and Christy L. Haynes^{2*}

¹Present address: Boston Scientific, 4100 Hamline Ave N., St. Paul, MN 55112
²Department of Chemistry, University of Minnesota, Minneapolis, MN 55455
³Present address: Boston Scientific, 3 Scimed Place, Maple Grove, MN 55311
*Corresponding Author E-mail: chaynes@umn.edu



Figure SI 1: Western blots of knockout mouse platelets incubated with (A) anti- κ , (B) anti- δ , and (C) anti- μ antibodies. The anti- μ antibody used in the blots shown here was the one sourced from Millipore Sigma. The blot membrane was overlaid with the x-ray film before scanning. Numbers and labels were added to the images.



Figure SI 2. The calibration curve was constructed by plotting the ratio of the serotonin peak: dopamine peak (internal standard) from measured HPLC chromatograms. The serotonin calibration curve was made using three replicates of known serotonin concentrations (0.0, 0.0625, 0.125, 0.25, 0.5, and 1 μ M). This calibration curve was used to calculate the limit of detection (0.017 μ M) and limit of quantification (0.052 μ M) for this method.



Figure SI 3: Comparison of cholesterol concentrations in platelets from control C57, μ -KO and κ -KO mice. No statistical significance was noted.



Figure SI 4: Dark-field images of representative activated (A) C-57 platelets, (B) κ -KO platelets, and (C) μ -KO platelets. The scale bar in all images represents 7 μ m.