# *Supplementary Information: Time- and Concentration-Dependent Effects of Exogenous Serotonin and Inflammatory Cytokines on Mast Cell Function*

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The supernatant and lysis from the mast cells were run with HPLC with electrochemical detection in a four minute method after being filtered.

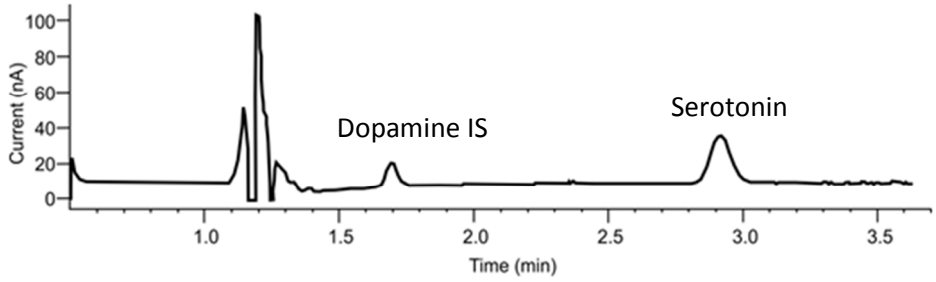


Figure 1: HPLC chromatogram of serotonin mast cell secretion with the addition of a dopamine internal standard

To determine concentrations of CXCL10 and CCL5 to stimulate mast cells, various concentrations were run and the highest concentrations of stimulation were picked to look at the total serotonin over time.

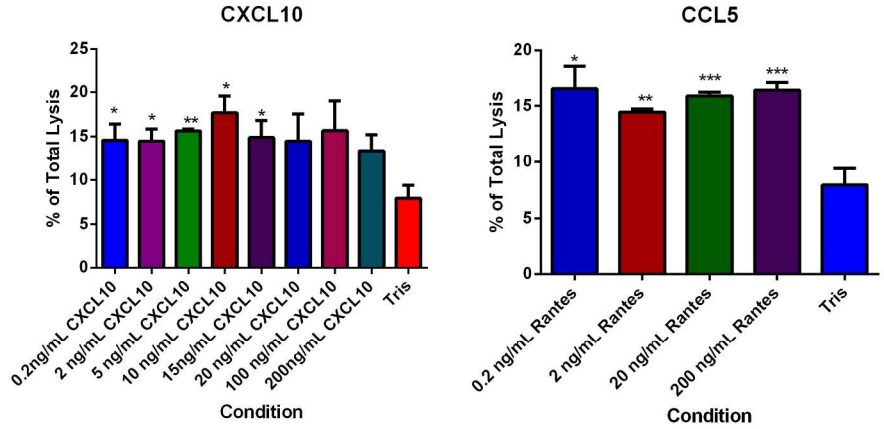


Figure 2: Degranulation of mast cells in response to various concentrations of CXCL10 and CCL5. *P ≤ 0.05 Vs. Tris control **P ≤ 0.005 Vs. Tris Control ***P ≤ 0.05 Vs. Tris Control using a T-Test

To determine if incubation with 5-HT induced MPMC degranulation, supernatant content of the granule-stored enzyme β-Hexosaminidase (β-Hex) was assessed. At each time-point, control (MPMCs incubated with tris buffer for 10, 30, or 60 min but exposed to no exogenous serotonin) absorbances were normalized to 100%, and a one-way ANOVA was used to assess significance. Data shown are mean ± standard deviation.

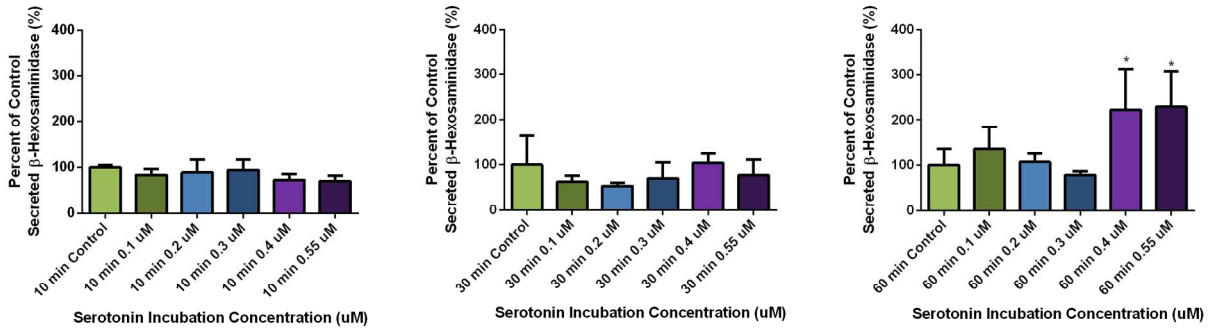


Figure 3. Degranulation of mast cells in response to exogenous serotonin was evaluated using an absorbance assay of secreted β-Hexosaminidase. *p ≤ 0.05 using one-way ANOVA.