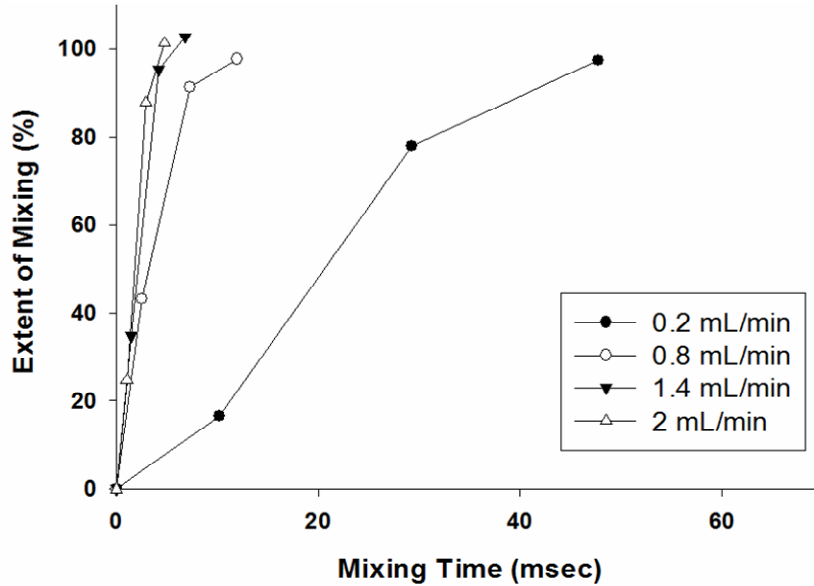
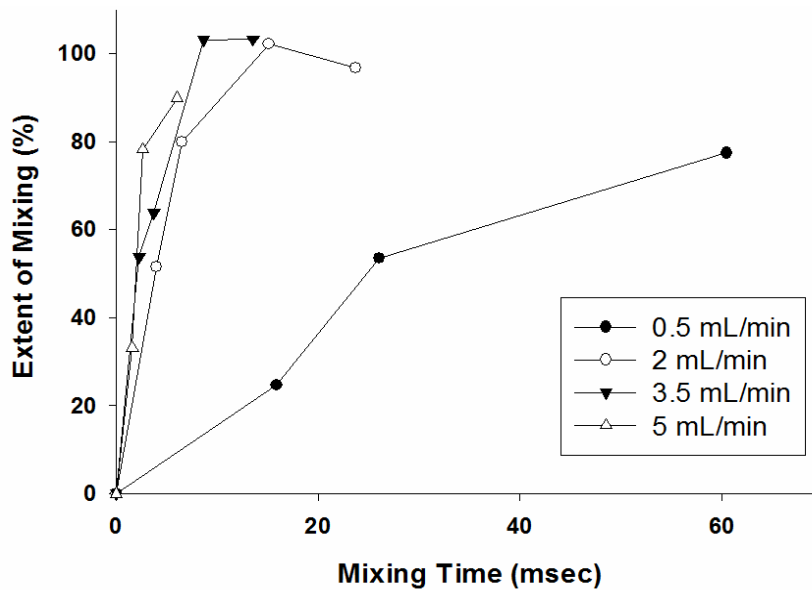


a.



b.



Supplementary Figure S1: Influence of volumetric flow rate on extent of mixing in SHM. The extent of mixing was determined with two 10 μ M fluorescein solutions, one fluorescent at pH 8.9 and the other non-fluorescent at pH 5.1, at approximately 2.1 mm, 6.2 mm, and 10.1 mm along the channel length. a. SHM with a channel cross-section of

79 μm x 200 μm . The two solutions were mixed at a 1:1 ratio using total flow rates of 0.2 ml/min (\bullet), 0.8 ml/min (\circ), 1.4 ml/min (\blacktriangledown) and 2.0 ml/min (Δ). b. SHM with a channel cross-section of 130 μm x 300 μm . The two solutions were mixed at a 1:1 ratio using total flow rates of 0.5 ml/min (\bullet), 2 ml/min (\circ), 3.5 ml/min (\blacktriangledown) and 5 ml/min (Δ). Note that only 5 equally spaced slices were taken when imaging the 130 μm x 300 μm geometry.