Supporting Information

Effect of methanol on desupersaturation of IMC

The desupersaturation kinetics of supersaturated solutions of IMC at 25 °C by crystallization onto seed crystals was measured at pH 2.0 and initial supersaturation of 6. Supersaturation was induced by adding either 0.55 mL of 1 mg/mL or 0.17 mL of 3.3 mg/mL solution of IMC in methanol into 100 mL of aqueous medium that was pre-equilibrated with IMC at pH 2.0. Aliquots were withdrawn at intervals over 2 hours filtered through 0.22 µm regenerated cellulose filters (Corning Inc., Corning, NY), diluted and analyzed for concentration of IMC using HPLC. The data is summarized in Table 1. At α level of 0.05, there is no difference in desupersaturation kinetics of IMC at pH 2.0 from σ_0 of 6 with different organic solvent content.

Table 1- The time to a supersaturation level of 1.2 starting from an initial supersaturation level of 6 at pH 2.0, with different organic solvent content.

Methanol added to 100 mL aqueous solution	**Time (min) from initial supersaturation, σ_o=6, to σ=1.2**	**Rate constant for integration of HA into the crystal, k_i' (L/mol sec)**
0.55 mL	24 ± 2	158 ± 10
0.17 mL	23 ± 2	167 ± 5

Effect of methanol on solubility of IMC

The effect of methanol on solubility of IMC was determined by measuring the solubility of γ-IMC in 0.01N HCl at pH 2.0 and 0.01N HCl containing 0.5%v/v of methanol. An excess (≈0.5 mg/mL) of γ-IMC powder was added to 50 mL of media in a glass vial at 25°C on a magnetic stirring plate with digital temperature reading (Isotemp; Fisher Scientific, Agawam, Massachusetts) for 2 hours; temperatures of the suspensions were confirmed by manually reading a thermometer. Samples were withdrawn at 1 hour and 2 hours, filtered through 0.22 µm regenerated cellulose filters (Corning Inc., Corning, NY), diluted and analyzed by HPLC. There is no statistical difference ($\alpha = 0.05$) in the solubility in 0.01N HCl at pH 2.0 and 0.01N HCl containing 0.5%v/v of methanol (Table 2).

Table 2- Effect of methanol on solubility of indomethacin.

Media	**Solubility (M)**
0.01 N HCl	2.8 ± 0.10
0.01 N HCl with 0.05% v/v methanol	2.8 ± 0.09