

Supplementary material

**Behavior of weakly adsorbing impurities in flow-through
ion-exchange chromatography**

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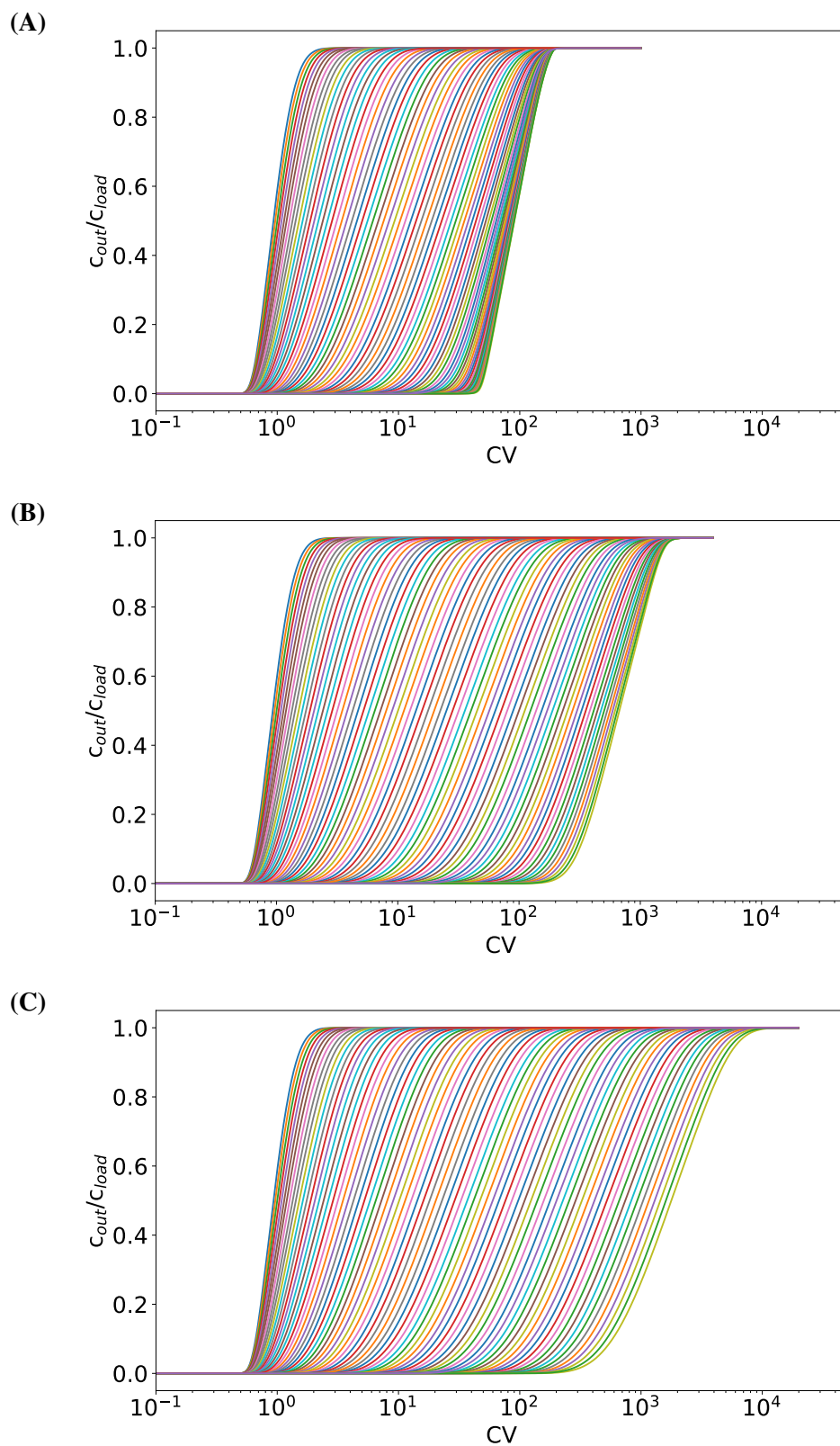


Figure S1: Breakthrough profiles from a simulation of solute loading at (A) 1 mg/ml, (B) 100 $\mu\text{g/ml}$, and (C) 10 $\mu\text{g/ml}$. Lines correspond to simulations with different K_{eq} , which increases by 4 orders of magnitude from left to right. Note that q_{max} was fixed at 100 mg/ml of packed column for all simulations, and the abscissa is on a logarithmic scale.

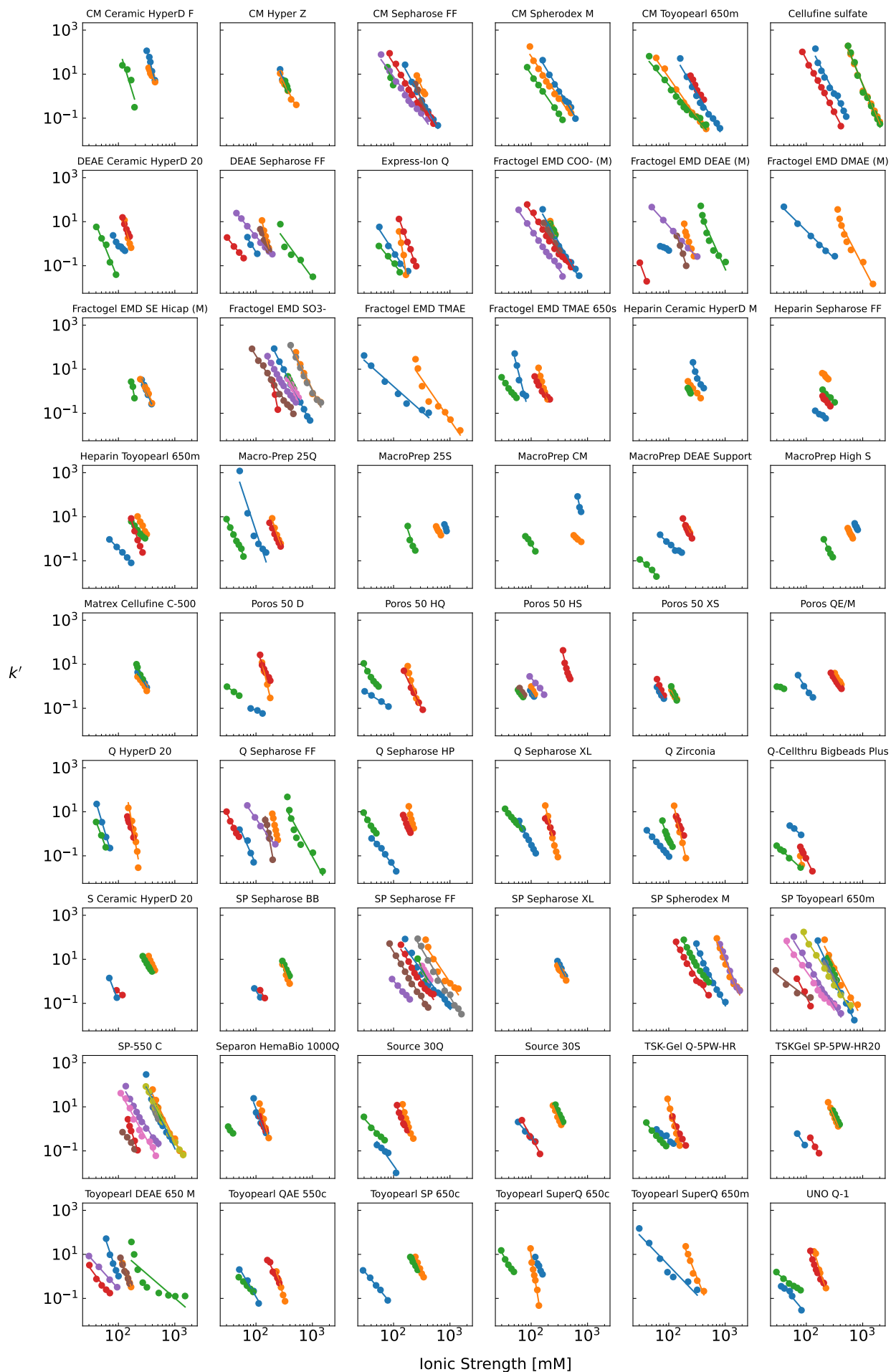


Figure S2: Isocratic k' data that were consolidated from the literature. Each series represents a unique protein-pH-resin combination, and lines represent quasi-SDM fits to the data.