How much material is required for a Biacore SPR experiment?

1. Ligand pre-concentration: 3-4 injections of 50-100 μL at 50-100 μg/mL. See Biacore training courses for detailed discussion of ligand pre-concentration.

2. Amine coupling: (similar for other immobilization strategies) ~100 μL of 50-100 μg/mL ligand.

3. Specificity analysis and regeneration pilots: 500 μL - 1000 μL of 500 nM (or higher, depends on K_d) analyte.

4. Surface stability test: 10 injections of 50-100 μL at 500 nM analyte.

5. Typical kinetic analysis: A concentration series of 8 injections for (16 if duplicates) at 50 μL /min flow rate for 2 min. per injection: 150 μL for each injection, starting at roughly 500 nM - 1000 nM, analyte concentration. Concentration range ideally should run from 0.1 x K_d – 10-100 x K_d.