

Biacore Experiment Checklist

To help us all keep the instrument better maintained, please fill out this form and place in the notebook next to each instrument at the conclusion of each experiment.

Experiment date: _____ Instrument used (circle one): Biacore 1 Biacore 2

Name: _____ Lab PI: _____

Ligand (molecule immobilized on sensor chip):

Protein Antibody DNA Sugar Other _____

Analyte (molecule in free solution):

Protein Antibody DNA Sugar Other _____

Capture (if applicable):

Protein Antibody DNA Sugar Other _____

Running buffer:

HBS-EP Other _____

Does running buffer contain protein? If so, what is the μM concentration of the protein? _____

Regeneration buffer including concentration: _____

Chip:

CM5 SA NTA Other _____

Experiment Checklist

- Contacted SPR lab to request time and assignment of instrument
- Filtered buffers and solutions through 0.22 μ filter and thoroughly degassed
- Pre-conditioned sensor chip
- Centrifuged ligand(s) and analyte(s) at 400,000xg for 10 minutes and checked for aggregates on day of use

- If inexperienced user, or if there is any uncertainty about anything, run experimental design by Virgil or Eileen
- Followed methods on our website for amine coupling, minimal biotinylation, etc. including extraclean steps as indicated
- Prepared 10 buffer injections using running buffer (same volume as samples) in R2A1-R2A10 to equilibrate instrument
- Prepared appropriate sample dilutions using running buffer and insured the volume is sufficient for type of injection selected
- Prepared buffer blanks so you can have 3 at beginning of experiment (after the 10 equilibration injections) and 3 between sample series as well as 3 at end of the experiment for double referencing. Report to Virgil or Eileen if unreferenced buffer blanks are > 10 RU.
- Made sure no air is trapped at bottom of tubes
- Placed blanks and sample tubes in correct holes in sample rack and made sure appropriate samples racks are selected.
- Ran Normalize from Tools:Working Tools menu following on screen instructions
- Written appropriate program to include standby once samples are read and insure volume of running buffer is adequate
- At end of experiment, removed sensor chip and running buffer and stored appropriately
- Performed required post experiment cleanup program after docking maintenance chip (2X prime, 1X Unclog, Desorb performed at 37°C)
- Cleaned area around instrument and bench. Returned all items to their correct storage location.

Use this space to report any unusual problems encountered while using the instrument. If buffer blanks look high or unusual, please also print a sensorgram of your buffer injections only (after hiding the first 10), with no referencing and with double referencing and place in notebook with this form.

Instrument hours for experiment: _____

Instrument hours for maintenance (NC): _____

Signature: _____

Date: _____