

Standard Operating Procedures

Laboratory Specific – Biochemistry Shared Instrumentation Facility

ForteBio BLItz: Biolayer Interferometer

Department: Chemistry and Biochemistry Date when SOP was written: June 3, 2013

Date when SOP was approved by the lab supervisor: June 4, 2013

Supervisor Name and Signature: Jorge Torres _____

Internal Laboratory Safety Coordinator/Lab Manager: Matthew Graf

Laboratory Phone: 310-206-5684 Office Phone: 323-447-6288

Emergency Contact: Primary - Matthew Graf (see above) or Jorge Torres 310-206-2092

Location(s) covered by this SOP: Young Hall 5044, 5048A, 5048B

Type of SOP: Process Hazardous Chemical Hazardous Class

Purpose

This instrument is used to perform a white light based assay analyze biomolecules in solution, dependent on the aggregation of a biomolecule analyte to the conjugated surface of a disposable probe.

The Primary Hazards of this instrument are minor in nature, but will arise from the mishandling of the instrument body during usage.

- **PINCH HAZARD:** This instrument has a closing lid that could result in a minor pinch. While the weight is extremely light (>10 grams) and serious injury couldn't occur, a blister or small cut could result if the lid is closed with too much force.
- **CHEMICAL CONTAMINATION:** This is a hazard present with all instruments in the facility, but the nature of the BLItz disposable probe system increase the likelihood of chemical contamination created by user mishandling. **GLOVES SHOULD NOT BE WORN WHEN HANDLING THE INSTRUMENT BODY OR MOVING PARTS. When removing/replacing probes on the instrument, only wear a glove if necessary based on the chemical nature of your samples. Furthermore, if a glove is needed, it should only be worn on the hand that touches the probe, so that your other hand is free to touch the instrument body for stabilization, without causing contamination of surfaces.**

Potential Hazards/Toxicity

Inhalation – N/A

Skin – N/A

Eyes – N/A

Ingestion – N/A

Additional – Standard Electrical Hazard for all instruments - avoid touching electrical junctures and mind liquid spills which could damage electrical components.

Basic Training Requirements

- Lab personnel working with the **any facility instrument** must have attended the '*Laboratory Safety Fundamental Concepts*' classroom training course offered by EH&S and have read and signed the Shared Instrument Facility General Use Safety Policy.
- Lab personnel must have attended an instrument specific training session with the Biochemistry Instrument TA or Instrument facility approved manager prior to any use, covering general use and safe practices of the instrument in question.

Personal Protective Equipment (PPE)

No Additional PPE is required beyond what is stipulated by the General Use Safety Policy.

Respiratory protection

None required

Hand protection

None required unless by the demands of a users personal experiment.

Eye protection

Standard Goggles, if required by experimentation.

Skin and body protection

Lab coat, long pants, closed-toed shoes.

Hygiene measures

Avoid touching instrument surfaces with gloved hands. Wipe instruments with 20% EtOH - dampened towel following use.

NEVER TOUCH Computer surfaces (mouse, keyboard etc) with gloved hands.

Engineering Controls

None required.

First Aid Procedures

Treat if possible in accordance with the type of injury, consult a physician or seek emergency care if necessary.

Spill and Accident Procedure

Clean any spill according to the demands of the chemical nature of the experiment being conducted. See the General Use Safety Policy.

Medical Emergency Dial **911** or **x52111**

Life Threatening Emergency, After Hours, Weekends And Holidays – Dial **911**

(or 310-825-1491 from cell phone) or contact the Ronald Reagan UCLA Medical Center (emergency room) directly at **x52111** (located at 757 Westwood Plaza, enter from Gayley Avenue). *Note: All serious injuries must be reported to EH&S at **x59797** within 8 hours.*

Non-Life Threatening Emergency– Go to the Occupational Health Facility (OHF), **x56771**, CHS room 67-120 (This is on the 6th floor, 7th corridor, room 120. Enter through the School of Dentistry on Tiverton Drive and proceed to the “O” elevator to the 6th floor.)Hours: M - F, 7:30 a.m. to 4:30 p.m. At all other times report to Ronald Regan UCLA Medical Center (emergency room) at **x52111**. *Note: All serious injuries must be reported to EH&S at x59797 within 8 hours.*

Needle stick/puncture exposure

N/A

Decontamination/Waste Disposal Procedure

BLItz probes are disposable, but require no special handling themselves. Special disposal may be required for tips dependent on the nature of the chemical exposure created by the experiment being performed. As stated in the General Use Policy, all waste must be removed from the facility and disposed of properly in the user’s primary laboratory space.

Label Waste

N/A

Store Waste

NO WASTE STORAGE ALLOWED IN FACILITY

Dispose of Waste

CHEMICAL WASTE TO BE DISPOSED OF BY USER OUTSIDE OF FACILITY

Gloves and towels free from exposure to Hazardous chemicals may be disposed of in provided trash cans.

Safety Data Sheet (SDS) Location

Copies Located in the “Facility Safety Binder” in Young Hall 5044

Protocol/Procedure

- 1) Remove any hand protection you are wearing.
- 2) Initialize instrument and computer as demonstrated during instrument specific training.
- 3) Open sample lid.
- 4) Remove probe from packaging and put onto probe arm as demonstrated during training.
- 5) If required by chemical nature of your experiment, put on hand protection.
- 6) Load sample into sample tray and tube into holder.
- 7) REMOVE hand protection, and close instrument lid, minding the PINCH HAZARD.
- 8) Perform experiment demonstrated during instrument training.
- 9) Open lid and remove probe – if hand protection is needed, wear it only on the hand touching the probe.
- 10) Repeat steps 4-9 for continued experimentation, if desired.
- 11) Dampen towels with 20%EtOH squirt bottle, and wipe down instrument and computer surfaces as needed.
NEVER SPRAY BOTTLE TOWARDS INSTRUMENT OR COMPUTER
- 12) Log out and shut down system as demonstrated during the instrument specific training.

NOTE

Any deviation from this SOP requires approval from a Facility Manager.

Documentation of Training (signature of all users is required)

I have read and understand the content of this SOP and have undergone training by an approved Facility Manager. I also attest that I have read and signed the Instrumentation Facility General Use Safety Policy prior to this instrument specific training.

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