
ISOFLUX Sample Processing Manual

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I. Fluxion Biosciences Discovery Services**About Discovery Services**

Fluxion Discovery Services provide cost-effective laboratory assays customized to client's experimental designs. Our laboratory is equipped with state-of-the-art proprietary instruments: IonFlux for automated high throughput patch clamp assays, BioFlux for cellular manipulation, observation, and analysis under physiological flow conditions, and Isoflux for rare and circulating tumor cells (CTC) isolation. Our services include but not limit to bio-film assays, platelet aggregation assays, CTC isolation, enumeration, molecular analysis, and bio-banking.

This Manual provides procedures for IsoFlux CTC enrichment, enumeration, and bio-banking services.

Hours of Operation

9:00 AM to 5:00 PM Monday to Friday (excluding holidays)

Address and Contact Information

Fluxion Biosciences
1600 Harbor Bay Parkway, Suite 150
Alameda, California 94502
USA
Tel: +16502414777
www.fluxionbio.com
support.fluxionbio.com

II. Sample submission instructions

Checklist for completion of sample submission

Pre-collection	
<input type="checkbox"/>	Signed agreement to process samples is in place (Purchase Order, Research Agreement, etc.)
<input type="checkbox"/>	As much advanced notice as possible is provided to Fluxion before collection (per Research Agreement or at least 24 hours in advance)
Sample Collection	
<input type="checkbox"/>	Samples are collected, packed, and sealed per guidelines
<input type="checkbox"/>	Shipment is sent with appropriate courier to exact address below (morning delivery is required)
<input type="checkbox"/>	Sample Submission Form (paper copy) is included with shipment
<input type="checkbox"/>	Sample Submission Form (electronic copy) is emailed to support@fluxionbio.com or to contact person
<p>Fluxion Biosciences, Inc. Attn: Sample Processing (Job #XXXX) 1600 Harbor Bay Parkway, Suite 150 Alameda, California 94502 USA Tel. +1650 241 4777 www.fluxionbio.com support@fluxionbio.com</p>	

Blood collection

Preparation

1. Prepare to ship the samples same day they are collected.
2. Samples are accepted Monday to Friday, excluding holidays. Please confirm with your courier that the sample will arrive at Fluxion during these days.
3. Materials required (Suggested part numbers are listed below. Comparable alternatives may be used. Please comply with your institution's and federal shipping guidelines):
 - 10cc EDTA Blood Collection Tube (BD part number 366643) or similar
 - Styrofoam shipping container: Small foam mailer – 3 tubes (Therapak 44903)
 - Plastic bio-specimen outer bags (Bio bag VWR part number 89400-274)
 - Outer shipping box (in corrugated carton VWR part number 89413-472)

Sample collection

Before collecting blood sample:

4. Label each tube with sample unique identification (ID)
5. Complete the Sample Submission Form (see Appendix C).

Blood collection:

6. Draw blood into 10cc EDTA Collection Tube using standard venipuncture procedures for collecting peripheral venous blood. Please adhere to your institution's protocol and guidelines. A minimum volume of 7mL is required or per Research Agreement.



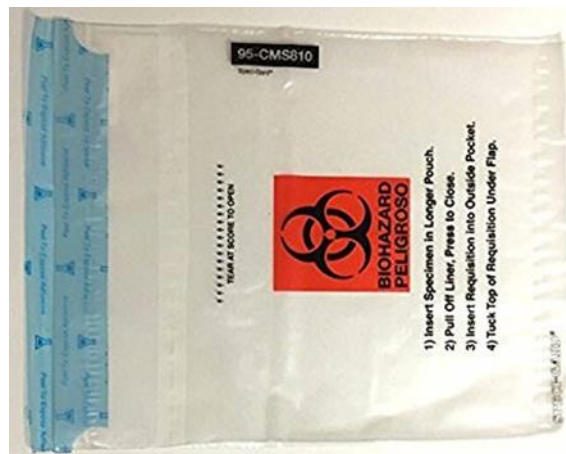
7. Gently invert the tube 8 to 10 times.

Sample packaging and shipping

8. Place the collection tube(s) in the Styrofoam shipping box



9. Place the box into the plastic specimen bag and seal.



10. Place the sealed bag into the insulated shipping box.



11. Fill the empty space with bubble wrap or shipping paper.

12. Enclose the completed Sample Submission Form inside the cardboard box and seal the box for shipment

13. Ship sample immediately at room temperature (18-25°C). Do NOT refrigerate or freeze at any time.

Precautions:

- Do not expose to temperatures less than 4°C or greater than 37°C.
- Do not freeze.
- Ship sample immediately (same day of collection).
- Handle sample with care; avoid shaking or unnecessary inverting of the tubes.
- Hemolysis of the sample will affect cell isolation procedures. Samples with excessive hemolysis may be rejected at Fluxion's discretion.

Sample Transfer to Fluxion Biosciences

14. Ship the sample same day as collection for same-day (local), or next day delivery. Shipping companies such as FEDEX, UPS, and local medical couriers all have same day or overnight delivery capabilities. Please contact Fluxion if you have any questions regarding shipments +1 650 241 4777.
15. **IMPORTANT:** When shipping overnight, please select a morning delivery option (often called 'Priority Overnight' or equivalent). Samples arriving late in the day may not be able to get processed. Please ensure that your shipment will arrive to Fluxion on a weekday (Monday to Friday, excluding holidays). Fluxion cannot be held liable for any delay or holding in shipment or delivery over the weekend.
16. Please inform your courier of the type of biological sample you are shipping and any associated details such as cold packs or potentially hazardous materials. Ensure any required forms are completed ahead of time to avoid delay.
17. Please also include the following e-mail address in your shipping courier's electronic shipment notification update: support@fluxionbio.com.
18. Adhere to D.O.T. and international shipping guidelines with respect to transport of biological materials. Please contact your courier or Fluxion for information if you are uncertain about the regulations for shipping various materials. Pack the samples in the appropriate materials as suggested by the guidelines included in this document.

III. Sample Receiving at Fluxion

1. Upon receiving the samples, verify that the sample ID matches that on the Sample Submission Form. Contact the Sender immediately for any discrepancy.
2. Log the sample in the dedicated laboratory notebook and binder. The enclosed Sample Submission Form may be used. Additional electronic entry system may also be used.
3. Note the date of blood draw, date of process, sample volume, sample ID, and the protocol/job ID number.
4. Note the physical appearance of the sample (color, condition, temperature, sign of lysis or aggregation, etc....)

5. Verify that appropriate sample is destined for the dedicated method of CTC isolation and analysis.
6. Verify if additional sample is included for processing or bio-banking.

Appendix C

SAMPLE SUBMISSION FORM

Date:
 Sender:
 Company/Institution:
 Contact information:
 (email and or telephone number)

Date of sample collection	Sample type	Volume	Quantity	Sample ID	Protocol Number / Study Identification / Job ID	Comment / brief protocol description
Example: August 08 2018	whole blood in EDTA tube	4mL	1	001	xxx-xxx-001	CTC isolation and enumeration