

SAMPLE PREPARATION AND SHIPPING GUIDE

INTRODUCTION

This document provides a guide for preparing and shipping samples for producing **Formalin Fixed Paraffin Embedded (FFPE)** blocks and **Cytospin** slides.

SAMPLE PREPARATION AND SHIPPING GUIDE

SECTION 1 – FOR PRODUCING FFPE TISSUE OR CELL PELLET BLOCKS

FFPE is the most commonly used specimen type in clinical practices. A tissue or cellular sample is fixed with formalin (typically 10% NBF), processed using a fully automated tissue processor, and embedded into paraffin block. Cellular morphology and most bio-molecules can be well preserved in FFPE blocks for extensive periods of time.

Sending samples for FFPE embedding:

1. For tissue specimens:

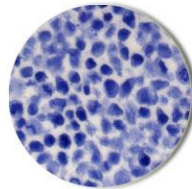
- 1) After fixing for 24 hours in **10% NBF**, briefly wash the samples with **1XPBS** (minimum of 20:1 solution/sample volume ratio) two times.
- 2) Briefly wash with **70% ethanol** (minimum of 20:1 solution/sample volume)
- 3) Add fresh **70% ethanol** (minimum of 20:1 solution/sample volume ratio)
- 4) The samples can be shipped cold (with ice packs) in **70% ethanol** via overnight shipping.

2. For producing A-FLX™ FFPE cell pellet using cultured cells, PBMCs, or cells from other bodily fluids:

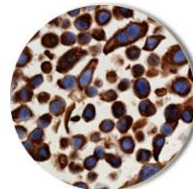
- 1) After harvesting, remove culture medium or fluid by centrifugation at 250 RCF for 5min in a conical tube.
- 2) Wash cells one time using **1XPBS** by centrifugation at 250 RCF for 5min.
- 3) Remove **1XPBS** and re-suspend cells thoroughly in **10% NBF** by pipetting, be sure to break large cell clumps.
Note: Small clumps may occasionally form depending on cell type, culturing condition, trypsinization condition, etc. It is normal, and even extensive pipetting won't completely break small cell clumps.
- 4) Fix cells for 24hr at ambient temperature or in a temperature controlled incubator (24-27°C) with rotation.
- 5) To ship fixed cells, use the method below:
 - a. Pellet cells by centrifugation at 500 RCF for 5min. Remove fixative and then re-suspend in **1XPBS** (approximately 20:1 solution/pellet ratio) thoroughly by pipetting or vortexing.
IMPORTANT: Do not perform additional washes. The 1XPBS solution will contain residual fixative, which keeps sample stable during shipping while not leading to over-fixation.
 - b. Ship samples cold (with ice packs) in **1XPBS** via overnight shipping.



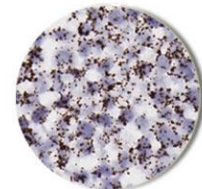
3. About *A-FLX™* FFPE cell pellets:
- A-FLX™* is a propriety technology developed by Acepix Biosciences that produces FFPE cell pellets with:
- High homology
 - High cross-block and lot-to-lot consistency
 - Excellent shape regularity
 - Customizable cell density and pellet size



Hematoxylin



IHC



RNA ISH

SECTION 2 – FOR PRODUCING CYTOSPIN SLIDES

Cytospin protocol is commonly used in clinical and research settings for preparing mono cell layers onto microscopic slides from:

- PBMC
- Bodily fluids, such as saliva and urine
- Cytology samples
- Cultured cells

Sending samples for cytospin:

- 1) Sample fixation:
 - a. Fix cells in appropriate fixatives according to lab protocols. Typical fixatives include **10% NBF, 50-100% methanol, and 70% ethanol.**
 - b. Pellet cells by centrifugation at 500 RCF for 5min. Remove fixative and then re-suspend in **70% ethanol** (approximately 20:1 solution/pellet ratio) thoroughly by pipetting or vortexing.
 - c. Ship samples cold (with ice packs) in **70% ethanol** via overnight shipping.



Note: Most alcohol-based fixatives will keep samples stable for at least 48hr if stored cold. Avoid shipping samples in progressive cross-linking agents, such as formaldehyde, as fluctuation in temperature and duration of shipping may cause variation in fixing strength.

ABOUT ACEPIX BIOSCIENCES

Acepix Biosciences, Inc. is an innovator in developing and providing high quality biological specimens for research and diagnostics. The company also provides high quality, fast turnaround, and economical services in the field of histo-pathology, biomarker discovery, and translational research. Acepix Biosciences is headquartered in San Jose, California. For more information, please visit www.acepixon.com.



Technical Note

SHIPPING

Please ship all packages to:
ATTN: Receiving Department
Acepix Biosciences, Inc.
31351 Medallion Drive
Hayward, CA, 94544