Sample Preparation Instructions (Drug discovery)

Please follow these guidelines for preparing and submitting your samples to Epigentek. We currently accept compounds, frozen cells/tissues and histone protein samples according to the assay patterns. Proper sample preparation along with the appropriate QC methods will allow the greatest chance for assay success.

Table I. Sample Input Quantity, Storage Buffer and QC Methods

Application	Sample Type	Input Quantity#	Sample Buffer	QC Method
Primary Screen of Enzyme Inhibitors	Compound	2-3 mg or 30 ul of 10 mM	DMSO solution or Powder*	spectrophotometry
IC50 determination of Enzyme Inhibition	Compound	2-3 mg or 30 ul of 10 mM	DMSO solution or Powder	spectrophotometry
Histone Modification Pattern Determination	Cell/tissue or Histone extracts**	0.5 M/10 mg or 500 ng extracts/target	Culture Medium or Extraction Buffer	spectrophotometry

*Compounds can be in powder form or dissolved in DMSO.

** Cell/tissue samples can be frozen in -80C with/without treatment of inhibitor or activator. Histone extracts can be isolated from various tissue or cell samples including flask or microplate cultured cells. Epigentek offers a histone isolation kit (CAT# OP-0006) for your convenience. See the "Sample Requirement" for details.

Sample Requirements

1. Compounds

- Compounds should be high quality and can be completely dissolved in DMSO.
- Required amount of compound powder depends on assay patterns and enzyme target quantities. In general, 2-3 mg could be sufficient for most of profiling requirement. If the compound is provided in powder form, the following information should be included: exact molecular weight; exact weight or amount; solvent that can be used dissolve the compound.
  If compound is in DMSO, the concentration should be at 10 mM and volume is dependent on assay patterns and enzyme target quantities. In general, 30 ul of 10 mM compound in DMSO stock is sufficient for 50 target enzymes with primary screen and 10 target enzymes with IC50 measurement.
- Samples should be stored at -20˚C.
- Samples should be stored and shipped in a tightly capped PCR plate, 0.2 ml tube, 0.5 ml tube or 1.5 ml tube.
- Samples should be shipped at 4˚C using frozen ice packs for next day delivery.

2. Cells/Tissues

- Treated/untreated cells/tissues should be stored in liquid Nitrogen or at -80C until shipping.
- The amount of cells/tissues should be of sufficient quantity for assay. Refer to Table I for input requirements.
- Frozen histone extracts should be stored and shipped in a tightly capped cryo tube.
- Cell/tissue samples should be shipped using sufficient dry ice for next day delivery.

3. Histone extracts

- Histones should be isolated using an appropriate method and isolated histone extracts should be stored at -80C until shipping.
- The concentration or amount of histones should be of sufficient quantity for assay. Refer to Table I for input requirements.
- Frozen histone extracts should be stored and shipped in a tightly capped 0.5 ml tube or 1.5 ml tube.
- Histone samples should be shipped using sufficient dry ice for next day delivery.

Sample Packaging Instructions

1. SAMPLE LABELING INSTRUCTIONS

Do not use a marker pen (even a permanent ink marker) to mark directly on the side of the tube or on the lid. Instead, write the sample information on a paper or adhesive label and secure the written label to the tube using transparent tape. Include a copy of the Sample Submission Form with your sample shipment. Make sure that the sample information on the Sample Submission Form matches the labels on the tubes.

2. SAMPLE PACKING INSTRUCTIONS

Samples should be stored and shipped in a tightly capped PCR plate, 0.2 ml tube, 0.5 ml tube or 1.5 ml tube. Individually seal the outside of each tube with Parafilm to prevent samples from accidentally opening, leaking, or unexpectedly evaporating. All samples should be placed inside of a 50 ml tube or holding rack to prevent damage or loss.

Compounds should be shipped at 4˚C using frozen ice packs. Cell/tissue and histone samples should be shipped at -20˚C using sufficient dry ice for next day delivery.

3. SAMPLE SUBMISSION FORMS INSTRUCTIONS

A Sample Submission Form, a Billing Form, a signed Quote Form and any relevant QC data must be submitted for each service project. The Sample and Billing forms can be downloaded from our website (www.epigentek.com). All information on the forms should be filled out. Please submit the completed forms via email to your representative before shipping samples to Epigentek. Please also include a printed copy of each form in the shipment.

Shipping Instructions

All samples must be shipped for Monday through Thursday delivery. No samples should be shipped for weekend delivery.

1. Please follow the sample preparation guidelines, sample packaging instructions and shipping instructions before shipping your samples.
2. Purified DNA should be shipped at 4˚C using frozen ice packs for next day delivery. RNA and chromatin should be shipped at -20˚C on dry ice for next day delivery.
3. Services for an order will not begin until all samples for that order have been received. Therefore, all samples should be shipped together.

Domestic (US and Canada) Shipping

a) Make sure that all samples are prepared and packaged according to the guideline given above.
b) Select reliable couriers such as FedEx (http://fedex.com/), UPS (www.ups.com) or DHL (http://www.dhl.com), and express next-day service for shipments within the United States.
c) Please use priority international shipping for international shipment and confirm that the carrier can facilitate the importation of nucleic acid samples into the United States. Following the federal guidelines for shipping lab specimens.

d) Ship samples to the following address:

Epigentek Group Inc.
110 Bicounty Blvd. Suite 122
Farmingdale, NY 11735
1-877-374-4368

e) Email support@epigentek.com the tracking information once the package has left your facility, using Sample Tracking Quote# XXX as the subject for the email.

International Shipping

a) All samples must be shipped for Monday through Thursday delivery. No samples should be should be shipped for weekend delivery.
b) Use express services (the fastest delivery offered) from a courier, such as FedEx, DHL, World Courier, UPS or USPS.
c) Contact your local international courier and complete an INVOICE (commercial invoice, customs invoice or pro-forma invoice) which is requested for customs, and include it with the shipment.
d) Please fill the INVOICE as below:
    - Compound, Cell/Tissue or Histone Samples for Research Use Only
    - Non-Dangerous, Non-Infectious
    - No Commercial Value, Value for Customs Only
    - Declare the value of the goods for customs [i.e. $1.00 (USD) or €1.00 (EUR)]
    - Number of samples and volumes [the # of samples, and the estimated volume]
    - Type of container
e) You may be also required by the courier to sign a USDA Statement or Toxic Substances Control Act Certification (declaration for regulations). Please refer to the information above or check "I certify that all the chemical substances in this shipment are not subject to TSCA".
f) Package the samples with (1) a completed Detailed Sample Information Form; (2) a completed and signed Project and Billing Information Form; (3) a signed Quote; and (4) include any QC data for the samples if you have them. Pack DNA samples in blue ice, and RNA samples and frozen tissues with sufficient dry ice.
g) Ship samples to the following address:

Epigentek Group Inc.
110 Bicounty Blvd. Suite 122
Farmingdale, NY 11735
1-877-374-4368

f) Email support@epigentek.com the tracking information once the package has left your facility, using Sample Tracking Quote# XXX as the subject for the email.