**Protocol for Tissue Preparation for Reverse Phase Protein Array Analysis**

**Reagents/supplies required, but not supplied by Proteomics Core**

Sample Tubes RB (Qiagen, Cat# 990381)

**Tissue Preparation Procedure:**

1. Label all tubes prior to adding tissue samples. Label tubes using the following format:

Example:

The name on the label should match with the RPPA Sample Submission Form.

1. Obtain a small tissue sample, between 2mm (15mg) to a maximum of 50mg of tissue. Try to provide a consistent size for all the samples. Please test the size needed to figure out the optimal tissue size/weight, based on your tissue type. Usually for most tissues like tumor and solid tissues i.e. Liver, Heart, Brain etc., 15 mg tissue is more than sufficient. While tissues like lung or normal breast tissues need larger piece.
2. All the tissue samples will need to be in the Sample Tubes (Qiagen, Cat#990381) to be processed by the Core.
3. Transfer samples to labeled Sample Tubes (perform on dry ice).
   1. While keeping the Sample Tubes on dry ice, transfer pellets from original tube to labeled Sample Tubes.
   2. Work quickly but surely using a pipette tip to transfer the tissue. For very small tissue samples, be careful not to lose the pellet during the transfer.
   3. Be sure to keep all tubes on dry ice so that tissue samples don’t begin to thaw prematurely. Premature thawing of tissue samples may cause degradation of proteins and affect results.
   4. Transfer 10 samples at a time. Once tissue samples have been transferred to 2ml Eppendorf tube, place samples in -80°C until it is time for lysis procedure.
4. Place all labeled Sample Tubes in a freezer box and label as follows:

PI Name/ Investigator Name Type of samples

Contact number Date of delivery

1. Store tissue samples at -80°C and deliver to Core in dry ice.
2. Email RPPA Sample Submission Form and make an appointment with the Core prior to delivering samples.
   1. Include a brief description as to how tissue were obtained and processed.
   2. Be sure to note if you have added any type of stabilizing reagent to the tissue. (Ex: RNA*later*)