Sample Submission for DNA Research
(Cells, Tissues, Blood and FFPE Tissues)

We recommend our customers to process the samples according to the protocols listed below. If you use other protocols, please provide us as much detail as possible on your method prior sample submission.

Cells Grown in Suspension

Recommended sample amount: 2 x 10^6 cells each sample.

1. Collect cells by low speed centrifugation and discard medium.
2. Wash cells with 2-5ml 1x PBS briefly, pellet cells at low speed and discard supernatant.
3. Store at -80°C or in liquid nitrogen and ship on dry ice.

Cells Grown in Monolayer

Recommended sample amount: 2 x 10^6 cells each sample.

1. Discard medium out of culture dish and wash cells with 2ml 1x PBS briefly.
2. Discard 1x PBS and trypsinize cells. Stop trypsinization with medium (including serum).
3. Pellet cells at low speed and discard supernatant.
4. Wash cells with 2-5ml 1x PBS briefly, pellet cells at low speed and discard supernatant.
5. Store at -80°C or in liquid nitrogen and ship on dry ice.

Tissues

Recommended sample amount: 10-25 mg each sample.

1. Collect fresh tissues immediately after surgical removal and wash with 1x PBS.
2. Pellet tissues at low speed and discard supernatant and add 20% glycerol or 20% DMSO.
3. Store at -80°C or in liquid nitrogen and ship on dry ice.

Whole Blood

Recommended sample amount: 2 ml whole blood each sample.

** Whole blood of "healthy" donors: leukocyte concentrations from 5 x 10^6/ml to 1 x 10^7/ml.*

** Whole blood of "unhealthy" donors: leukocyte concentrations higher than 1 x 10^7/ml or lower than 5 x 10^6/ml*

1. Collect blood in tubes containing a standard anticoagulant.
2. Store tubes at -80°C or in liquid nitrogen and ship on dry ice.

Lymphocytes or Buffy-coat Cells Separated from Whole Blood

Recommended sample amount: 2 x 10^6 cells each sample.

1. Collect Lymphocytes or Buffy-coat cells separated from whole blood using appropriate protocol for your laboratory.
2. Store at -80°C or in liquid nitrogen and ship on dry ice.

FFPE Sample

1. Standard formalin-fixation and paraffin-embedding procedures always result in significant

fragmentation of nucleic acids. To limit the extent of fragmentation, be sure to:

a) Fixate tissue samples in 4-10% formalin as quickly as possible after surgical removal
b) Use a fixation time of 14-24 hours (longer fixation times lead to more severe fragmentation, resulting in poor performance in downstream assays)
c) Thoroughly dehydrate samples prior to embedding

2. Store and ship at room temperature.