diagenode
Innovating Epigenetic Solutions

GUIDELINES

Sample Submission Guidelines for Methylation Arrays

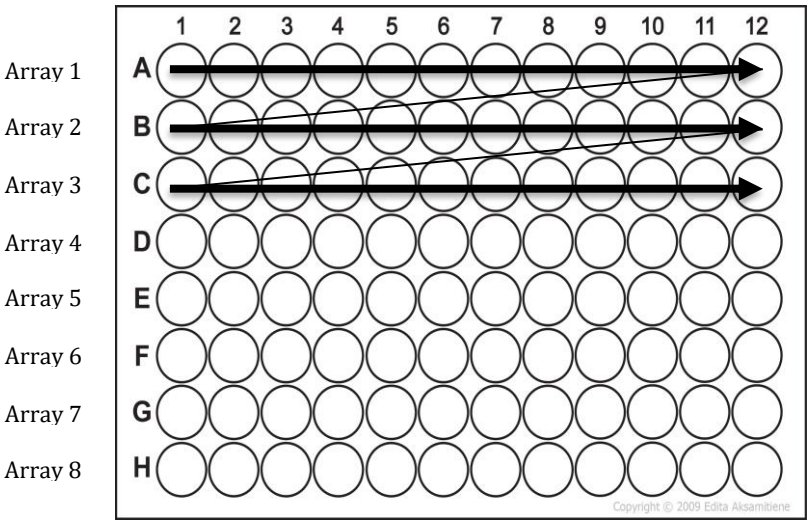
Contact: services@diagenode.com

1. Isolation of genomic DNA

- The quality of the DNA to be used is very important, we therefore highly recommend to use commercial kits (ex: Qiagen portfolio).
- Genomic DNA must be free of protein. Regardless the choice of DNA extraction protocol, proteinase K digestion is thus mandatory.
- We recommend to apply a RNAse treatment followed by DNA purification on column (Diapure (Diagenode, C03040001)) (not with beads-based techniques e.g. AMPure beads).
- Do not vortex high molecular weight DNA as this might lead to fragmentation, but mix by pipetting.

2. Genomic DNA quantification and preparation

- The concentration of double-stranded DNA **must be quantified using a fluorescence-based assay** such as Picogreen or Qubit assay. Photospectrometric techniques like Nanodrop cannot be used as they tend to overestimate the concentration of double-stranded genomic DNA.
- We recommend to check for genomic degradation by analysis of a small aliquot of each sample on a 0.8% agarose gel.
- For projects ≥ 24 samples, it's mandatory to provide the samples in a 96 wells plate and to adjust the samples to a uniform concentration which should be > 10ng/µl. Projects with less than 24 samples can be provided in single tubes (always the same tube type) with clear labeling.
- All samples should be adjusted to a uniform concentration of 20 ng/µl (or to a uniform concentration of 10ng/µl as a strict minimum).
- Please organize/group your samples already in the same way as they should be loaded on the array. Pay attention to distribute the samples in a randomized way within the different arrays to minimize any bias. (eg: Avoid loading all control samples in array 1 and all treated samples in array 2).



- Please **send at least 1 µg (500 ng as a strict minimum) for methylation projects.**

3. Shipment Instructions

- When ready to ship your samples, please contact our services team at services@diagenode.com so they can provide you with the complete shipment address.
- Prepare the samples in 1.5 mL tubes or 96-well plates and label them carefully.
- Samples can be shipped on dry ice or with a coolpack (4° C).
- Fill the Sample ID sheet file and the biosafety form with all relevant information (including the desired randomization in tab 2) and send it by email to services@diagenode.com. Please mention the project ID 109_xxxx that has been attributed to your project (expl : 109_0001).
- Print the Sample ID sheet and the biosafety form and include it in your package when shipping the samples.

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- Attach a Dry Ice Sticker with the net weight (see below) on the outside of the parcel when using dry ice. Please send the parcel at the beginning of the week to ensure delivery before the weekend.

- Please contact your courier (DHL, TNT, Fedex, UPS, etc) to arrange the shipment of the samples to the provided address.

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- **Communicate the tracking number to Diagenode** (services@diagenode.com)