

Sample Submission Guidelines for WGBS/EM-seq

Contact: services@diagenode.com

1. Isolation of DNA

- The quality of the DNA to be used in WGBS/EM-seq is very important, we therefore highly recommend the following products for DNA extraction :
 - **Cells, blood and tissue samples**: DNeasy Blood & Tissue Kits (Qiagen)
 - **FFPE samples** : QIAamp DNA FFPE Tissue Kit (Qiagen)
 - **Plasma samples (cfDNA)** : QIAamp MinElute ccfDNA Kit (Qiagen)
- Genomic DNA must be free of protein and RNA.
- Do not vortex high molecular weight genomic DNA as this might lead to fragmentation, but mix by pipetting.

2. DNA quantification and preparation

- The concentration of double-stranded DNA must be quantified using a fluorescence-based assay such as Invitrogen's Qubit dsDNA High Sensitivity kit or picogreen based technologies.
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 WGBS/EM-seq on genomic DNA, we require at least 250 ng of gDNA quantified in a fluorescence-based assay, with concentration higher than 5 ng/μL and the volume higher than 50 μL.

Lower amount for gDNA and FFPE can be accepted upon discussion with Service's team.

For WGBS/EM-seq on plasma cfDNA, we require at least 20ng of cfDNA quantified in a fluorescence-based assay, with concentration higher than 1 ng/μL and the volume higher than 20 μL

3. Shipment Instructions

- Prepare the samples in 1.5 mL tubes and label them carefully. When shipping more than 24 samples, please provide them in a 96-well plate and distribute them in rows, starting from A01, then A02, etc...
- Always send the samples on dry ice and make sure you supply sufficient dry ice for the whole transport and unexpected delays.

GUIDELINES

- Fill the Sample ID sheet_WGBS/EM-seq.xlsx file with all relevant information and send it by email to **services@diagenode.com**.
- Print the Sample ID sheet_WGBS/EM-seq and include it in your package when shipping the samples.
- Attach a Dry Ice Sticker with the net weight (see below) on the outside of the parcel. Please send the parcel at the beginning of the week so it gets to us before the weekend



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

Catherine Creppe
Diagenode
WGBS/EM-seq service
Liège Science Park
Rue du Bois Saint-Jean, 3
4102 Seraing (Ougrée)
Belgium

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