gDNA QC

Genomic DNA QC (Please refer to “Sample Prep Services”)

1. Quantitation and estimation of DNA purity using NanoDrop spectrophotometer readings of A_{260}, A_{260}:A_{280} and A_{260}:A_{230} ratios.
2. Assessment of DNA integrity using Agarose Gel Electrophoresis.

- **DNA Purity:**

  DNA purity can be determined by NanoDrop ND-1000 Spectrophotometer readings of A_{260}:A_{280} and A_{260}:A_{230} ratios.

- **DNA Concentration:**

  DNA concentration can be determined by NanoDrop Spectrophotometer reading of $A_{260.}$ An A_{260} of 1 is equivalent to 50ug/ml.

  A_{260} X dilution factor X 50 = ug DNA / ml

  Alert---Any RNA contamination in the DNA sample will lead to an overestimation of concentration, since all nucleic acids absorb at 260 nm.

- **Genomic DNA Integrity:**

  Genomic DNA (gDNA) integrity can be assessed by Agarose Gel Electrophoresis. For best results from the MeDIP-Seq, DNA samples must show no signs of degradation (smearing DNA bands). One predominant band indicates intact gDNA.