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 microarrays, DNA samples must show no signs of degradation (smearing DNA bands). One predominant band indicates intact gDNA.