Brigham Research Assay Core (BRAC) 221 Longwood Avenue Boston, MA 02115 Director: Gordon Williams, MD

## DNA Extraction from whole blood or blood cells (per 10 mL blood)

Method:	PureGene DNA Isolation (Alcohol Precipitation)
Kit Manufacturer:	QIAGEN, Valencia, CA
Description:	Cells are lysed with an anionic detergent in the presence of a DNA stabilizer. The DNA stabilizer limits the activity of intracellular DNases and also DNases found elsewhere in the environment. Other contaminants, such as proteins, are removed by salt precipitation. Finally, the genomic DNA is recovered by precipitation with alcohol and dissolved in a buffered solution containing a DNA stabilizer. Purified DNA typically has an A260/A280 ratio between 1.7 and 2.0, and is up to 200 kb in size. The DNA can be safely stored at -80°C.

## **Collection and Performance Characteristics**

Tube type:	Preferred: EDTA Alternate: ACD (Acid citrate dextrose), Paxgene™ or Heparin
Minimum Volume:	10 mL of blood or equivalent in cells per 10 mL of whole blood
Lowest Reportable Value:	2 ug
Reference Range:	50-350 ug of DNA per 10 mL whole blood.