

1. DNA Extraction

Table 1. DNA Extraction from Whole Blood (Manual)

Description	Vendor and Catalog Number	Comment
QIAamp DNA Blood Mini Kit (50 Reactions)	QIAGEN c/n 51104	Recommend
QIAamp DNA Blood Mini Kit (250 Reactions)	QIAGEN c/n 51106	

Table 2. DNA Extraction from Whole Blood (Automatic)

Description	Vendor and part number	Comment
QIAcube	QIAGEN	More information, please contact each manufacturer.
MagNA Pure 24 System	Roche	
Maxwell	Promega	

Table 3. DNA Extraction from Dried Blood Spot (DBS) (Manual)

Description	Vendor and part number	Comment
Gensolve DNA Complete (50 Reactions)	Gentegra c/n GSC-50	Recommend
Gensolve DNA Complete (100 Reactions)	Gentegra c/n GSC-100	

- ➔ DNA extraction from dried blood spot is very difficult. In our experience, Gensolve DNA Complete kit enhances total DNA yield. Please find your distributor at the Gentegra homepage (<http://www.gentegra.com/distributor.html>) to get more information of the kit.

2. DNA Quality Control

Table 1. DNA Purity Test

Description	Vendor and Catalog Number	Comment
NanoDrop 2000/2000c	ThermoFisher Scientific c/n ND-2000, ND-2000C	Recommend

- ➔ We recommend using Spectrophotometer for measuring A260/A280 and A260/A230 (A260/A280 =1.65~2.0, A260/A230= 1.8~2.1)
- ➔ In case of DNA extracted from dried blood spot sample, it is hard to measure DNA purity so this step can be skipped.

Table 2. DNA Quantitation Test

Description	Vendor and Catalog Number	Comment
Qubit 3.0 Fluorometer	ThermoFisher Scientific c/n Q33216	Recommend
Quantus Fluorometer	Promega c/n E6150	

- ➔ In case of DNA extracted from whole blood, DNA must be at a minimum concentration of 50ng/ul and total DNA amount 5~10ug in TE.
- ➔ In case of DNA extracted from dried blood spot sample, a minimum total amount needed is 300ng in TE.