

Extraction and Banking Service

Extraction

The production of good quality, high molecular weight DNA and RNA from a variety of human sample types is a key stage in molecular genetic analysis. We offer an extraction service, and also a banking service if required (see below). A number of extraction methods are tailored to meet requirements including sample type, sample volume/size, and analysis methods planned. Samples extracted through our service are used in a variety of analyses – Next Generation Sequencing (NGS), SNP array, MLPA, Sanger sequencing, fragment sizing, pyrosequencing and other molecular technologies.

Methods

We pride ourselves in having access to the most advanced automated methods. We aim for a high level of accuracy and precision, higher throughput and turn around of samples. We are capable of accommodating different sample types as outlined below. The extraction chemistries used ensure maximum yield and quality for the sample provided.

Our protocols are ISO 15189 accredited.

Sample Types (Please contact the laboratory to discuss sample types not shown)

- Blood – fresh / frozen
- Fixed Formalin Paraffin-Embedded (FFPE) tissue
- Fresh tissue
- Saliva / Buccal swabs
- Plasma

Banking

Indefinite storage of DNA and cDNA as well as temporary RNA storage facilities are available, allowing future analysis of samples. They are stored in 2D-barcoded tubes with freezer-friendly labeling allowing for quicker identification and access on request. The main stock is kept in the bank, but an aliquot can be provided for collection or sent elsewhere for analysis.

Services offered (prices available on request):

Service
Fresh/frozen blood sample (1 to 4ml) – single extraction (Omega Bio-Tek chemistry)
Fresh or fixed tissue (no macrodissection required), saliva/buccal swabs, small volume blood (<1ml)
Fixed tissue plus macrodissection
Plasma – isolation, extraction of cfDNA – please contact laboratory with requirements
Single extraction and storage of DNA from fresh / frozen blood sample for research projects

Turnaround times depend upon various factors – please contact us to discuss your requirements.

As an ISO-accredited laboratory we offer a range of genetic diagnostic and research services. These include stratified medicine, gene screening (including NGS), and targeted molecular analyses.

Please contact the lab or visit our website for more details – medicalgenomicswales.co.uk

Sample Requirements

Please label samples with at least two identifiers and date of collection (where applicable)

All samples must be accompanied by request form

Consent for testing & DNA storage is assumed when request for test received

Contact Details

All Wales Genomics Laboratory,
Wales Genomics Health Centre,
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Links

Omega Bio-Tek
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