BioChain Human Tissue DNA and RNA

From: Myers HudsonAlpha ENCODE group
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BioChain Sample Descriptions

Human genomic DNA and total RNA were purchased from BioChain (Hayward, CA). BioChain provides nucleic acid preparations from a range of human tissues and cell types from single donors. The donor ID number in the Description field of the ENCODE common cell types table indicates samples obtained from the same donor. The age, ethnicity and type of nucleic acid are also indicated in the Description column. A normal karyotype indicates that these samples were obtained from disease-free patients and are not expected to have a cancer or otherwise abnormal karyotype.

Vendor ID and Availability

Vendor ID denotes Vendor_Catalog number_Lot number. Because these samples were obtained from a limited amount of human tissue rather than a cell line, additional preparations may or may not be available. To search for additional preparations from BioChain, search for the catalog number on the BioChain website (http://www.biochain.com/biochain/shop1.aspx) product search. If samples from this tissue are still available, the catalog number will return and item with instructions for purchasing the sample. However, for information about the lot number, BioChain should be contacted directly. If the search does not return an item, BioChain should also be contacted directly to inquire about the availability of nucleic acid from this tissue or the availability of a similar tissue.

The BioChain contact person for the DNA and RNA samples from human tissues obtained by the Myers lab is Peter Wang. He can be contacted at pwang@biochain.com.

Nucleic Acid Purification and Quality Control by BioChain

Genomic DNA was isolated by BioChain with a proprietary modified guanidine thiocyanate technique. The DNA was dissolved in 1xTE (10 mM Tris pH 8.0, 1 mM EDTA) buffer. The quality and purity of genomic DNA were tested by spectrophotometer and electrophoresis. A260/280 was between 1.8 and 2.0, A260/230 is >2.0 (detected in 10 mM Tris-Cl, pH 7.5). DNA was treated with RNase to ensure elimination of RNA contamination. Genomic DNA was successfully digested by Hind III and b-Actin expression was tested by PCR amplification.

Total RNA was isolated by BioChain with a modified guanidine thiocyanate technique and stored in RNA storage buffer. The integrity of the RNA was examined by visual inspection for the presence of intact bands of 18s and 28s ribosomal RNA after electrophoreses on a denaturing agarose gel. The quality and purity of total RNA were

tested by spectrophotometer. A260/280 was between 1.8 and 2.0 (detected in 10 mM Tris-HCl, pH 7.5). The RNA was treated by DNase I, and tested as DNA free RNA by PCR. As a final quality control, cDNA was synthesized successfully using this RNA as template.