

FFPE DNA Extraction Kits

Four Proven Ways to Simplify FFPE Extraction

Four Methods, One Goal: Fantastic Extractions Everything at Your Fingertips!

Formalin-fixed, paraffin embedded (FFPE) tissue specimens represent an excellent source for retrospective studies of many archived and morphologically defined pathologies. Unfortunately, nucleic acids extracted from FFPE specimens have often been challenging, as nucleic acids become cross-linked and degraded during the archiving process. Extracted nucleic acids are usually highly fragmented and chemically modified thus inadequate for downstream applications. BioChain has generated 4 different FFPE DNA extraction kits to fit your needs. These kits have been successfully tested for downstream applications, such as qPCR and Next Generation Sequencing.

Applications:

Isolated DNA can be used for:

- PCR amplification
- Array CGH analysis
- Copy Number Variation analysis
- DNA Next Generation Sequencing

Solution Based FFPE DNA Extraction Kit

Demonstrated by users to be the best commercial kit in isolating small fragment DNA¹.



Key Features

- High DNA yield
- High DNA purity
- Optimal DNA for downstream applications (e.g., qPCR and NGS)
- Safe method: avoids xylene and other toxic solvents
- 4 Extraction Kits tailored to your needs:
 - solution based
 - column based
 - bead based
 - automated

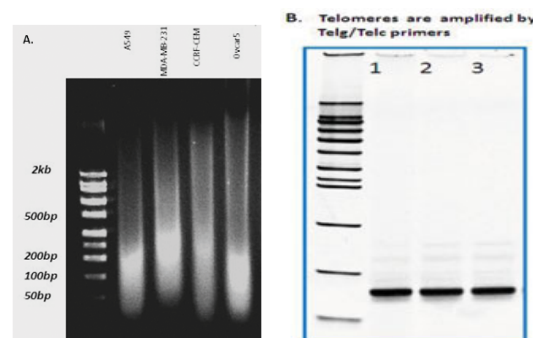


Figure 1. DNA Extracted from FFPE Sections

A. Genomic DNA extracted from 4 human FFPE cell lines

B. Telomeres were amplified in triplicate from FFPE gDNA isolated from the A549 cell line.

(Courtesy from Hui Wang et al. 2012¹)

Column Based FFPE DNA Extraction Kit

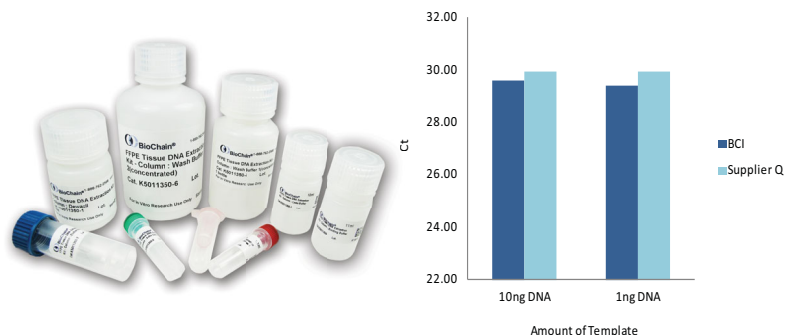


Figure 2. DNA extracts from human pancreas FFPE sections analyzed with qPCR using β -actin as target. DNA was extracted using BioChain's FFPE DNA extraction kits (column based) and supplier Q's kit.

Automated FFPE DNA Extraction Kit

AnaPrep 12: BioChain's automated nucleic acid extraction system. DNA extracted from human FFPE tissue with AnaPrep FFPE DNA Extraction Kit is comparable or better than manual kits.



Table 1. Result from Next Generation Sequencing using DNA extracted with the AnaPrep FFPE DNA Extraction kit.

Specimen	Extraction Kit	Total Number of Variants
Human Lung Tumor	AnaPrep Automated Extraction Kit	449
Human Lung Tumor	Supplier Q	438

Table 1. Of the 48 genes tested on FFPE sections from the same human lung tumor block, the following 46 genes exhibited variants: ABL1 AKT1 ALK APC ATM BRAF CDH1 CDKN2A CSF1R CTNNB1 EGFR ERBB2 ERBB4 FBXW7 FGFR1 FGFR2 FGFR3 FLT3 GNAQ GNAS HNF1A HRAS IDH1 JAK3 KDR KIT KRAS MET MLH1 MPL NOTCH1 NPM1 NRAS PDGFRA PIK3CA PTEN PTPN11 RB1 RET SMAD4 SMARCB1 SMO SRC STK11 TP53 VHL

Bead Based FFPE DNA Extraction Kit

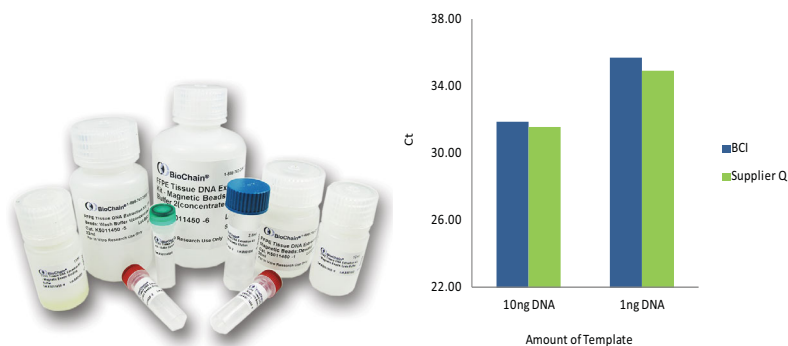


Figure 3. DNA extracts from human pancreas FFPE sections analyzed with qPCR using β -actin as target. DNA was extracted using BioChain's FFPE DNA extraction kit (bead based) and supplier Q's kit.

Catalog No.	Product	Unit
K5019100	FFPE Tissue DNA Extraction Kit	1 kit
K5011450	FFPE Tissue DNA Extraction Kit-Magnetic Beads	1 kit
K5011350	FFPE Tissue DNA Extraction Kit-Column	1 kit
Z1322009	AnaPrep FFPE DNA Extraction Kit	1 kit
Z1321001	AnaPrep 12 Instrument	1 EA

Please inquire about our other kits and applications.