

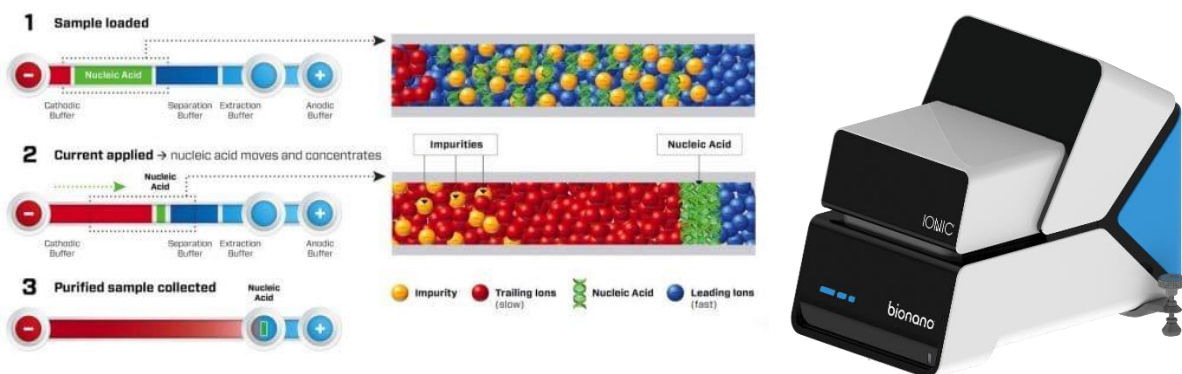
# Purification of DNA/RNA from FFPE blocks

Bionano (former Purigen Biosystems) developed a revolutionary workflow to purify nucleic acids from complicated samples like FFPE.

## Introduction

The credibility of Comprehensive Genomic Profiling (CGP), Whole Exome Sequencing (WES) or RNA-Seq hugely depends on the DNA/RNA input quality. Therefore, Purigen Biosystems internalised the technique IsoTachoPhoresis (ITP) into Ionic® Purification System for extraordinarily efficient DNA/RNA isolation.

As the first one in central Europe, IAB adopted ITP as a standard part of NGS workflows. Using Ionic® Purification System, IAB offers reliable DNA/RNA isolation from Formalin-Fixed Paraffin-Embedded (FFPE) blocks and other complicated samples.



## Method

[Ionic® Purification System](#) is an automated nucleic acids extraction workflow that purifies DNA/RNA from a crude sample with minimum steps in less than 4min hands-on time.

The main advantages of the Ionic® Purification System lie in the low sample input and effortless workflow. The quality of the isolates is unprecedented and appreciated mainly by those using DNA/RNA from FFPE samples for NGS applications. Especially workflows based on hybridisation capture probes, like TSO500 or Twist Exome 2.0, benefit from higher input material quality.

The applications focus on complicated and low amount samples, and the portfolio is growing.

- FFPE to pure DNA
- FFPE to pure RNA
- FFPE Complete DNA and RNA from a single slide
- Tissue to DNA
- Cells to DNA
- Viral RNA

## Conclusions

Nucleic acid purification using an ITP-based solution the *Ionic® Purification System* by Bionano delivers a simple automated solution with a minimum hands-on time required.

IAB recommends using the *Ionic® Purification System* for every FFPE nucleic acid purification, as the benefits for downstream applications like [Twist Exome sequencing](#) or the [TS0500](#) test are priceless.