



FFPE RNA-Seq Service

High-quality data from the most challenging samples, trust Lexogen's FFPE expertise!

Formalin-fixed, paraffin-embedded (FFPE) samples are one of the most **challenging inputs** for RNA sequencing and require special handling and expertise. Our FFPE RNA Sequencing Service provides excellent, cost-efficient transcriptome profiling from FFPE samples or any other degraded, low-quality, or low RNA input samples.

Our success in processing these complex samples comes from years of hands-on experience and well-established and optimized workflows. Our end-to-end service includes RNA extraction from FFPE curls, different library preparation options, and tailor-made data analysis.

Working with us

Benefit from our streamlined FFPE RNA-Seq services or start at any step from extraction to data analysis and reporting. Our different service packages can additionally be **customized** to fit your **individual needs** and requirements.



Consultation

We identify the best experimental design for your project and address all of your specific needs by customizing our workflows to them.



Sample Extraction

We extract RNA from FFPE curls and perform a DNA removal step where applicable.

Sample QC is included.



Library Preparation

We select the ideal library prep solution depending on your research question.

Library QC is included.



Sequencing

We always use the most suitable sequencing parameters for your application.



Data Analysis & Report

We offer in-house stan-dard data analysis as well as custom-design options.

Data QC is included.

Why is a devoted FFPE RNA-Seq Service needed?

FFPE samples are **challenging input** for RNA-Seq due to limited (accessible) RNA amounts, degradation of RNA, gDNA contamination, chemical modifications of RNA, and cross-links with other molecules. We faced all these challenges in heterogenous sets of FFPE samples and successfully developed strategies how to deliver **robust and reliable results** even from **highly degraded** and **lowly concentrated** FFPE starting material.

Tackle vital questions of oncology with us!

Among our most successful FFPE RNA-Seq projects are:

- ✓ Tumor/ biobank characterization of clinical samples,
- Responses to cancer treatments in patients,
- ✓ Gene ontology and pathway analysis for cancer research,
- ✓ Tumor target discovery in healthy vs. patient samples,
- Discovering tumor biomarkers by miRNA-Seq, & many more.

How does our FFPE RNA-Seq Service stand out?

- In-depth consultations on project design and data analysis options based on individual requirements and needs.
- Years of hands-on experience with low-quality FFPE RNA (DV200 < 30 %) and other degraded RNA (RIN < 5).
- Compatible with **low RNA input** FFPE material (<50 ng).
- End-to-end solution for FFPE RNA-Seq from FFPE RNA Extraction to data analysis and detailed report.
- Well-established workflows using Lexogen's FFPE-optimized technologies.
- Ideal for large scale high-throughput screening projects.

Our FFPE RNA-Seq Service is as individual as you are!

We offer different solutions to uncover the secrets within your FFPE samples. Choose between FFPE Gene Expression Profiling or FFPE Whole Transcriptome Sequencing, depending on your research question.

FFPE Gene Expression Profiling

- ✓ Ideal choice for gene expression analysis
- ✓ Gene ontology analysis
- ✓ High-throughput screenings
- ✓ Biomarker discoveries
- ✓ Retrospective target validation studies

FFPE Whole Transcriptome Sequencing

- ✓ Covering non-coding transcripts
- ✓ Alternative splicing studies
- ✓ Detection of fusion genes and SNPs
- ✓ Biomarker discoveries
- ✓ Customized workflows, e.g., for panel enrichment



Want to capture DNA levels, too?

Exploit the **full potential** of your FFPE samples with Lexogen NGS Services, and combine our FFPE RNA-Seq Service with **DNA-Seq applications**, including **Whole Genome or Exome Sequencing**.

What customers say about our FFPE RNA-Seq Service

Throughout my career, leading genomic projects and departments, I have always been a fan of Lexogen chemistry. When I finally decided to co-found a genomics company, I was delighted to hear that Lexogen had a services arm, and signed up immediately. We work with extremely challenging samples, from biobanked FFPEs to micro-organ samples. At every step Lexogen has worked closely with us, even helping to optimise our protocols, to ensure the best possible results.

Dr. Quin Wills, Co-founder and CSO, Ochre Bio

Interested in our NGS Services? Consult with us on your project:

