

Pharmacology models for nucleic acid therapeutics

Discover the potential of nucleic acid therapeutics through our advanced gene delivery characterisation platform.

Custom assays insights

- Delivery mechanisms
- Biodistribution patterns
- Tissue-targeting efficacy
- Gene-editing efficacy
- Immune response dynamics
- Tolerability

Key services

- Model and cellular assay generation including CRISPR
- Validation with human induced pluripotent stem cell (iPSC) derived models
- Studies in immunodeficient, immunocompetent and humanised or transgenic mouse models
- Bioluminescence/fluorescence in vivo imaging for real-time monitoring of RNA/DNA delivery
- Gene delivery detection methods, including single-cell sequencing, RNAscope

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Explore our gene delivery platform

Advanced in vitro and in vivo analysis:

Characterise the potential of your nucleic acid therapeutic (e.g. LNPs, AAVs) with our high-content analysis and in vivo platform, offering detailed insights into the mode of action.

Uptake

- Quantification of fluorophore-labelled RNA/DNA

Endosomal escape

- Utilisation of fluorescent Gal9 reporter assay for precise assessment

Delivery

- Evaluation of GFP expression from delivered RNA
- Versatile assay system adaptable to various readouts and cell lines/tissues (for example iPSC derived)

Combine your assay with state-of-the-art readouts

- Next-generation and single-cell sequencing

In vivo biodistribution and efficacy assessment

Reporter systems:

- Bioluminescence imaging
- Fluorescence imaging
- Oncology models
- Mouse reporter line studies

Ex vivo analyses:

- Single-cell sequencing
- Target mRNA quantification
- Protein expression
- RNA in situ hybridisation
- Flow cytometry analysis
- Immunohistochemistry assessment

Tolerability assessment

- Cytokine profiling
- Liver enzyme profiling
- Complement activation