AAV-ITR Sanger Sequencing



A Breakthrough AAV-ITR Sanger Sequencing Solution

Azenta Life Science's proprietary Sanger sequencing method sequences through difficult inverted terminal repeat (ITR) regions of adeno-associated virus (AAV) to expedite screening and validation of leads for your cell and gene therapy research. The protocol prevents abrupt reduction in sequencing signals at the start of the ITR hairpin and reads through the full length of the ITR region. AAV-ITR sequencing can be combined with our primer walking service to sequence whole AAV vectors.



Features and Benefits

- Qualitative assessment of the integrity of wild-type and partially-truncated ITR regions in AAV plasmids
- Ph.D.-level customer support throughout the project
- Advanced network of dropboxes and couriers for convenient sample submission*
- Increased read lengths and improved data quality allow for early detection of point mutations
- Turnaround time starting at just 5 business days*
- Online ordering system for real-time order management



^{*}Not applicable for GLP AAV-ITR sequencing orders

Genomics & Analytical Services | Preclinical & Clinical

GLP AAV-ITR Sanger Sequencing



Good Laboratory Practice (GLP) is a set of principles intended to assure the quality and integrity of non-clinical laboratory studies to support products regulated by government agencies. GLP studies are typically performed in preclinical development and GLP compliance is required for non-clinical safety studies submitted for regulatory approval. Azenta Life Science's proprietary AAV-ITR Sanger sequencing GLP workflows are compliant with US FDA regulations (21 CFR part 58).

GLP AAV-ITR Sanger Sequencing Workflow



1. Assay Design

Development of client-approved study protocol & optimization of primers and PCR conditions



2. Sample Processing

Sample preparation, amplification, and sequencing in accordance with study protocol



3. Data Analysis & Reporting

Detailed study report available after data quality review

Quality oversight at each step to ensure GLP compliance

Features and Benefits

- Increased read lengths and improved data quality allow for early detection of point mutations
- Rigorous planning, proven technology, and an outstanding quality management system instill confidence your project will meet FDA regulations
- Dedicated Study Director for proactive, transparent communication throughout your entire project
- Final report includes a description of methods, list of SOPs, raw data, detailed analysis, signed GLP compliance statement, and QA inspection dates

Applications

AAV vector-related IND submissions

AAV vector-related BLA submissions

