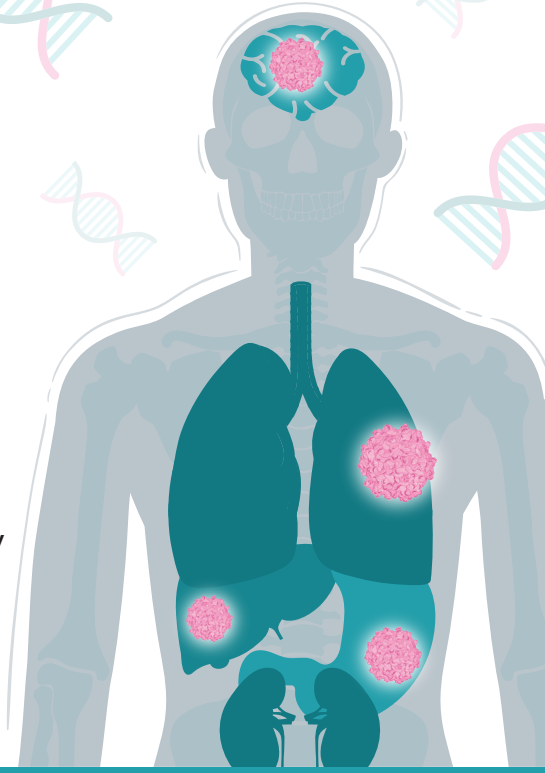
VectorBuilder

AAV Biodistribution

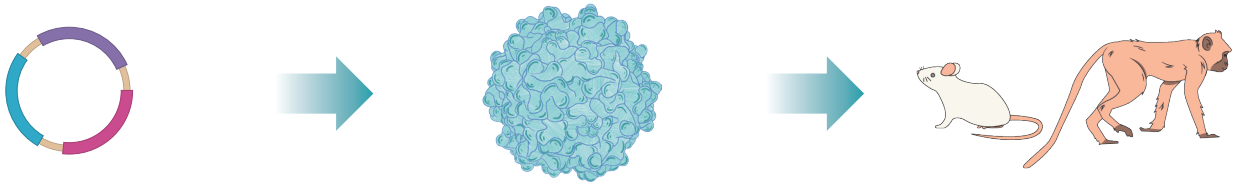


AAV has emerged as a promising viral vector for preclinical and clinical gene therapy applications due to the several advantages it offers including prolonged transgene expression, broad tropism, non-pathogenicity, and low immunogenicity in humans. Assessing the distribution and persistence of AAV vectors in various body tissues and organs at the developmental and preclinical stages is critical to ensure the success of any AAV-based gene therapy. AAV biodistribution studies been have shown to be highly instrumental for identifying off-targets effects, thereby playing a significant role in the safety assessment of AAV vectors. Whether you are at the early developmental stage or at the preclinical stage of your research, VectorBuilder can be your trusted partner to help you with your AAV biodistribution studies.

Highlights

- Full-service platform to fulfill all your AAV preclinical and clinical CRO and CDMO needs.
- Multiple species including mouse, rat, and nonhuman primate (NHP).
- Multiple analytical assays including fluorescence imaging, flow cytometry analysis, luciferase assay, qPCR, and RT-qPCR.
- Multiplexing analysis using barcode and NGS for assessing the biodistribution of different vectors within the same animal.
- In house availability of various AAV serotypes including 1, 2, 3, 4, 5, 6, 6.2, 7, 8, 9, rh10, DJ, DJ/8, PHP.eB, PHP.S, AAV2-retro, AAV2-QuadYF, and AAV2.7m8.
- Multiple routes of AAV administration by highly trained experts.
- Full technical support covering every aspect of your AAV project.

Our Capabilities



AAV vector design/optimization & cloning

High-titer AAV packaging for any serotype

AAV biodistribution profiling in multiple species

Inquire about our AAV biodistribution & other related services at

service@vectorbuilder.com

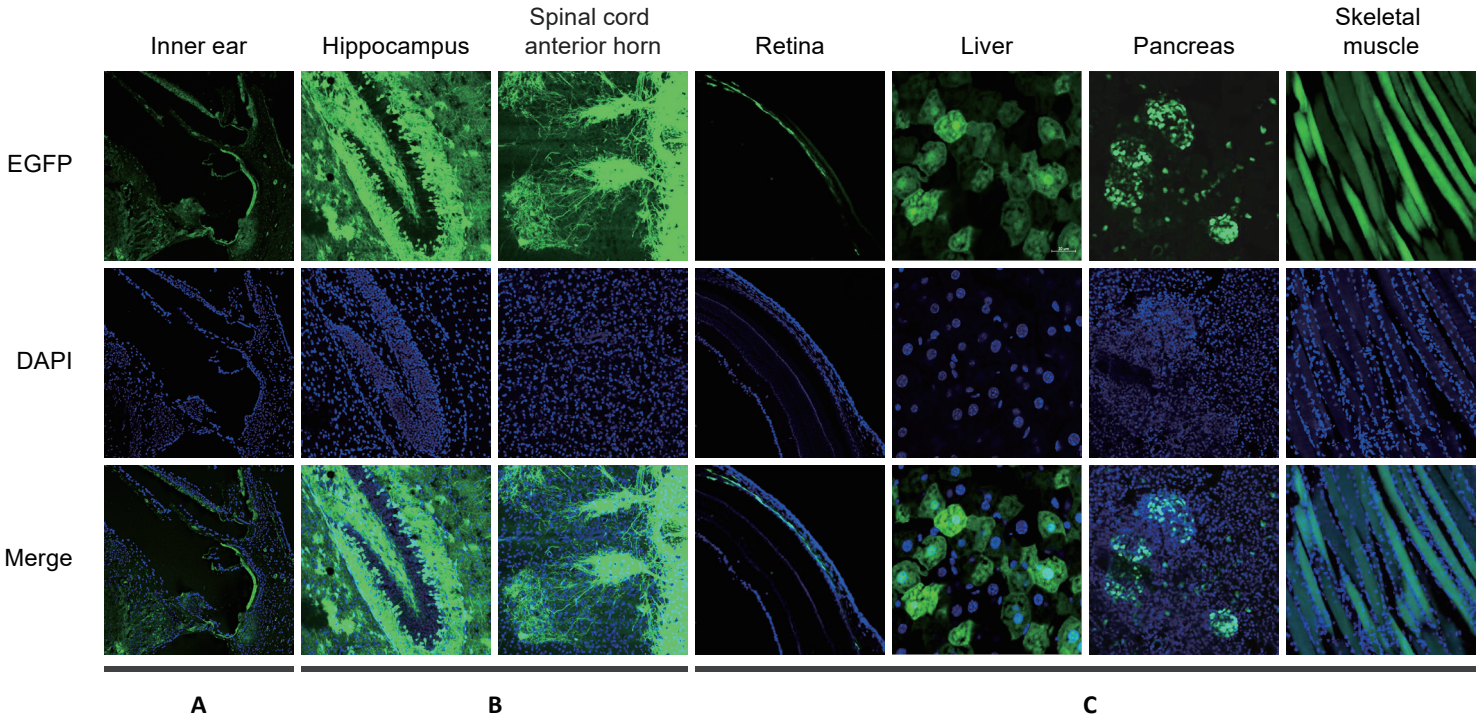


Figure 1. AAV9 carrying CAG promoter driving EGFP was administered to mice by various routes. EGFP and DAPI fluorescence was analyzed in the following organs: (A) inner ear, images were taken 13 days after vector delivery by tympanic injection to the left ear; (B) hippocampus and spinal cord anterior horn, images were taken 10 days after vector delivery by facial vein injection; (C) retina, liver, pancreas, and skeletal muscle, images were taken 12 days after vector delivery by tail vain injection.

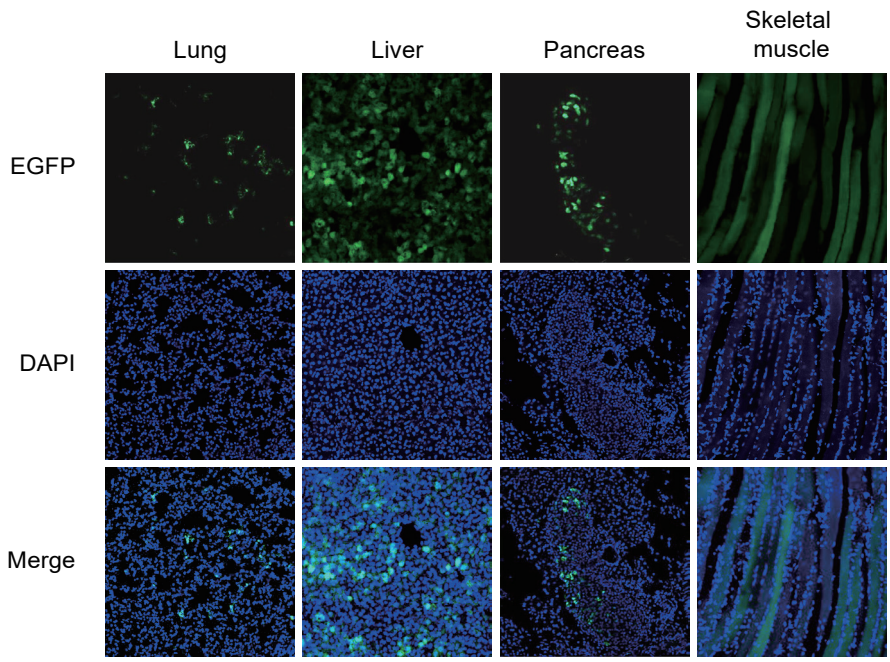


Figure 2. AAV1 carrying CMV promoter driving EGFP was administered to mice by tail vein injection. EGFP and DAPI fluorescence was analyzed in lung, liver, pancreas, and skeletal muscle. Images were taken 12 days after injection.