rAAV Serotypes

Serotype	Characteristics	Tissue Tropism	Applications
rAAV1	High transduction efficiency in muscle tissues	Skeletal and cardiac muscle, CNS	Muscular dystrophies, certain CNS disorders
rAAV2	Well-characterized, widely used	Muscle, liver, CNS	Hemophilia, retinal diseases, muscular dystrophies
rAAV4	Unique for sialic acid binding	Eye, CNS	Ocular gene therapy, certain CNS-targeted applications
rAAV5	Unique tissue tropism	CNS, liver, airway epithelial cells	Neurological conditions, respiratory diseases
rAAV6	Similar to rAAV1, high efficiency in muscle tissues	Skeletal muscle, cardiac muscle, lung tissues	Muscular dystrophies, respiratory conditions
rAAV7	Good transduction efficiency	Liver, muscle, CNS	Metabolic and muscular disorders
rAAV8	High transduction efficiency, broad tropism	Liver, muscle, retina	Liver-targeted therapies (e.g., hemophilia), metabolic disorders, ocular diseases
rAAV9	Can cross the blood-brain barrier (BBB)	CNS, cardiac, skeletal muscle	Neurodegenerative diseases (e.g., spinal muscular atrophy), cardiac and muscular therapies
rAAVDJ	Hybrid serotype, broad tissue tropism	Liver, muscle, CNS	Versatile gene therapy applications
rAAVrh10	High transduction efficiency, derived from non-human primates	CNS, liver, muscle	Neurodegenerative disease treatments, liver-directed therapies