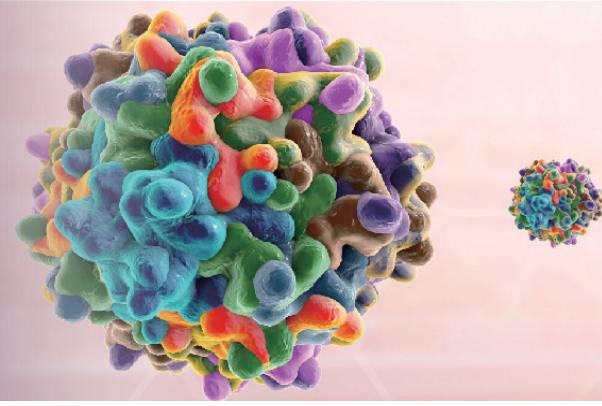




AAV Capsid Engineering

Proven technology paving your path to effective gene and cell therapy



What is AAV?

AAV (adeno-associated virus) is a DNA virus that has gained significant attention in the field of gene and cell therapy due to its ability to drive transgene expression in specific target cells.



AAV2, 3, 7, 8, 9, rh10, DJ



AAV1, 6, 9, rh10



AAV1, 2, 3, 4, 6, 7, 8, 9, rh10



AAV2, 3, 4, 5, 9, rh10



AAV1, 2, 4, 5, 8, 9, rh10, DJ, PHP.B



AAV5, 8, 9, rh10



AAV3, 5, 9, rh10



AAV6

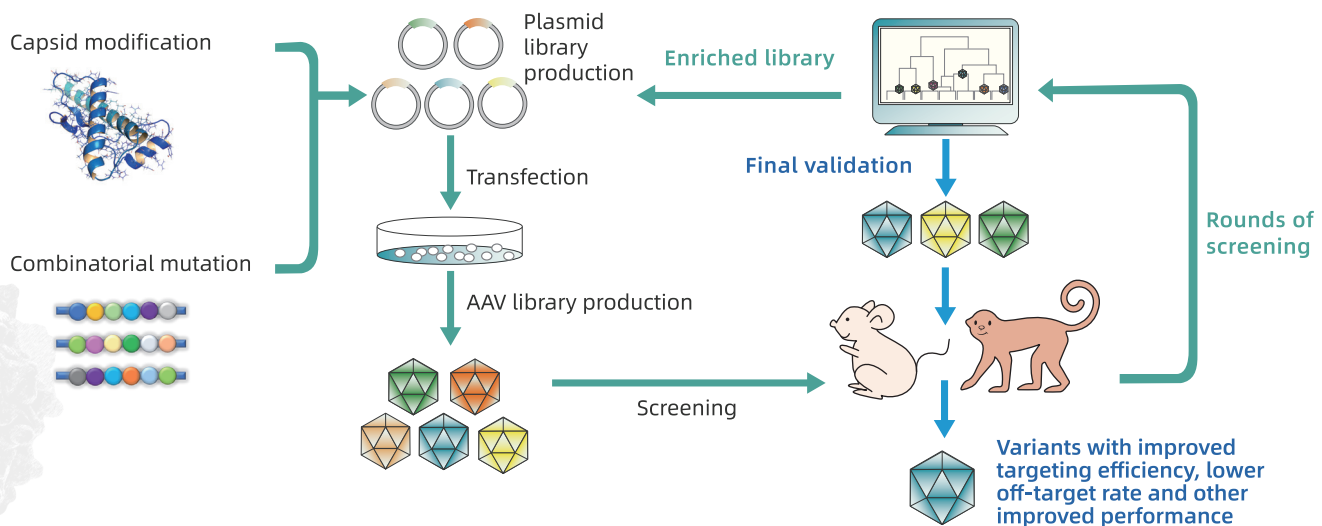
AAV capsid tropism

AAV capsid tropism refers to the ability of the AAV to selectively infect and transduce specific cell types based on the presence of receptors or other factors on the surface of a cell.

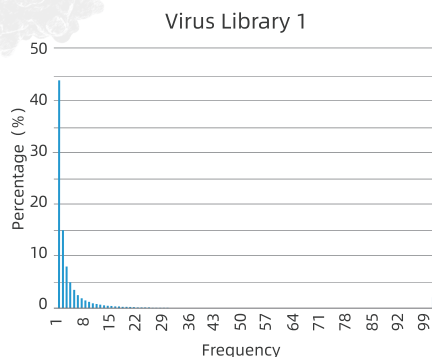
What PackGene's **Pi-Icosa AAV Capsid engineering service** can do?

- Enhance the specificity and efficiency of gene delivery to target cells.
- Minimize the risk of off-target effects and unwanted immune responses.
- Produce gene therapies that are more precise and effective in treating specific diseases or conditions.

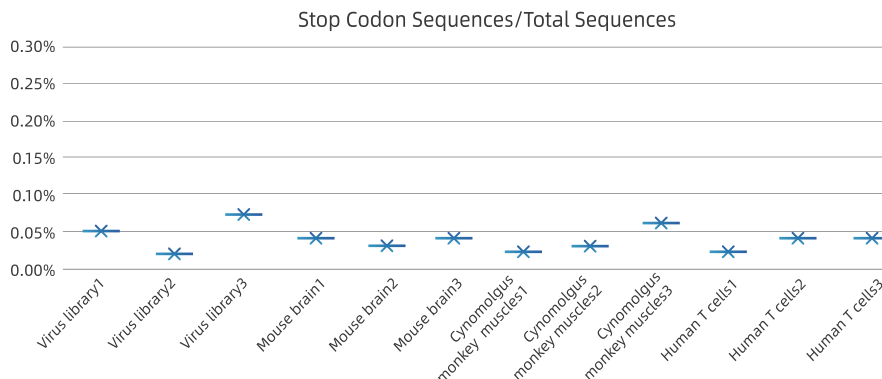
Capsid library design and construction → Screening → Validation



PackGene's π -Icosa Capsid library is highly diversified and uniform, and has extremely low mispackaging rate, ensuring a much more reliable screening result.

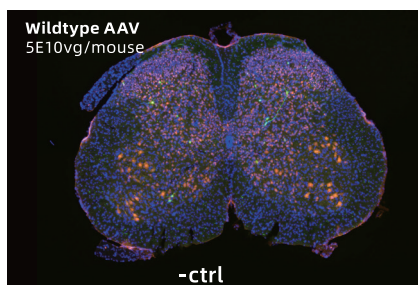


Excellent pre-screening library diversity and uniformity

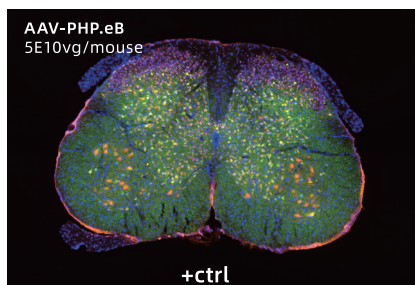


Extremely low mispackaging rate : <0.1%

Example: AAV-PG008, a CNS targeting variant engineered via π -Icosa system



14 days after lumbar injection in mouse. Sample size=5
Sample size=5



What we offer

Steps	Procedure
Round 1	• Plasmid and virus library construction
	• In vivo testing
Round 2	• Variants enrichment, library construction and virus packaging
	• In vivo testing
Potency	• Top candidates analysis
	• Top candidates plasmid construction and virus packaging
	• Verification in vivo

Animal	Injection	Organ
Mouse (Mus musculus)	Intravenous	Any type of Organ except Brain
	Intravenous	Brain
Cynomolgus monkey (Macaca fascicularis)	Intravenous	Any type of Organ except Brain
	Intrathecal	Brain

*Standard packages include two rounds of screening + validation. Animal test and NGS are included. If more rounds of screening, number of animals or virus quantity are needed, we will evaluate the additional cost and turnaround time. Additional cost if the animal tests need to be customized.



Interested in π -Icosa AAV Capsid engineering service?
Speak to our Ph.D. level technical support **TODAY!**

Visit us at www.packgene.com

1-866-491-7300 (toll-free)
1-713-913-6961

info@packgene.com