

Abstract

A nucleic acid construct for improving an adeno-associated virus yield, and a construction method therefor. The nucleic acid construct comprises: an adeno-associated virus (AAV) element, and a polynucleotide encoding an IE protein. Said AAV element comprises a polynucleotide encoding a Cap protein, a polynucleotide encoding a Rep protein, and an AAV cis-regulatory element. The construction method comprises integrating an AAV element carrying an exogenous target gene and a polynucleotide that encodes the IE protein into to a baculovirus vector backbone. The obtained recombinant adeno-associated virus (rAAV) has a low empty capsid rate, while the rAAV yield of a single cell and a unit volume culture is increased, the production cost is reduced, and the production is easy to scale up.