

ABSTRACT

Provided are a gene therapy vector for treating Parkinson's disease and a use thereof. Specifically, provided is an adeno-associated virus (AAV) vector for treating Parkinson's disease,
5 which can simultaneously express functional tyrosine hydroxylase (TH), GTP-cyclohydrolase 1 (GCH1) and aromatic amino acid decarboxylase (AADC) to promote dopamine synthesis. Also provided are an AAV virus particle containing the AAV vector, a composition containing the AAV vector or the AAV virus particle, and uses of the AAV vector, the AAV virus particle and the composition in the preparation of drugs for preventing or treating Parkinson's disease.