ABSTRACT OF THE DISCLOSURE

HIGH-TRANSDUCTION-EFFICIENCY RAAV VECTORS, COMPOSITIONS, AND METHODS OF USE

The present invention provides AAV capsid proteins comprising modification of one or a combination of the surface-exposed lysine, serine, threonine and/or tyrosine residues in the VP3 region. Also provided are rAAV virions comprising the AAV capsid proteins of the present invention, as well as nucleic acid molecules and rAAV vectors encoding the AAV capsid proteins of the present invention. Advantageously, the rAAV vectors and virions of the present invention have improved efficiency in transduction of a variety of cells, tissues and organs of interest, when compared to wild-type rAAV vectors and virions.

Figure for publication: None