CLAIMS

1. A recombinant adeno-associated virus (AAV) vector comprising:

   (a) a variant AAV2 capsid protein, wherein the variant AAV2 capsid protein comprises at least four amino acid substitutions with respect to a wild type AAV2 capsid protein of SEQ ID NO:1; wherein the at least four amino acid substitutions are present at the following positions in an AAV2 capsid protein sequence: Q457M, S492A, E499D and F533Yand further comprises amino acid substitutions with respect to the wild type AAV2 capsid protein at the following positions in the AAV2 capsid protein sequence: V125I, V151A, A162S and T205S, and the residue N312; and

   (b) a heterologous nucleic acid comprising a nucleotide sequence encoding a gene product.

2. A recombinant AAV2 vector according to claim 1, wherein (i) the variant AAV2 capsid protein consists of a sequence of SEQ ID NO:2, or a sequence having at least 95% sequence identity thereto.

3. A recombinant AAV2 vector according to either of claims 1 or 2, wherein the variant AAV2 capsid protein further comprises one or more amino acid substitutions with respect to the wild type AAV2 capsid protein at the following positions in the AAV2 capsid protein sequence: 585 and 588.

4. A recombinant AAV2 vector according to claim 3, wherein the variant AAV2 capsid protein comprises one or more of one or more of the following residues: S585 and T588.

5. A recombinant AAV2 vector according to claim 3 or claim 4, wherein the variant AAV2 capsid protein comprises one or more of the following amino acid substitutions with respect to the wild type AAV2 capsid protein: R585S and R588T.

6. A recombinant AAV2 vector according to any of claims 1 to 5, wherein the variant AAV2 capsid protein further comprises one or more amino acid substitutions with respect to the wild type AAV2 capsid protein at the following positions in the AAV2 capsid protein sequence: 546, 548 and 593.
7. A recombinant AAV2 vector according to claim 6, wherein the variant AAV2 capsid protein comprises one or more of one or more of the following residues: D546, G548, and S593.
8. A recombinant AAV2 vector according to claim 6 or claim 7, wherein the variant AAV2 capsid protein comprises one or more of the following amino acid substitutions with respect to the wild type AAV2 capsid protein: G546D, E548G and A593S.
9. A recombinant AAV2 vector according to any of claims 1 to 8, wherein the recombinant AAV2 vector exhibits increased transduction of a neuronal or retinal tissue compared to an AAV2 vector comprising the corresponding wild type AAV2 capsid protein.
10. A recombinant AAV2 vector according to any preceding claim, wherein the gene product comprises an interfering RNA or an aptamer.
11. A recombinant AAV2 vector according to any of claims 1 to 10, wherein the gene product comprises a polypeptide.
12. A recombinant AAV2 vector according to claim 11, wherein the gene product comprises a neuroprotective polypeptide, an anti-angiogenic polypeptide, or a polypeptide that enhances function of a neuronal or retinal cell.
13. A recombinant AAV2 vector according to claim 12, wherein the gene product comprises glial derived neurotrophic factor, fibroblast growth

factor, nerve growth factor, brain derived neurotrophic factor, rhodopsin, retinoschisin, RPE65 or peripherin.

14. A pharmaceutical composition comprising:
    (a) a recombinant AAV2 vector according to any preceding claim; and
    (b) a pharmaceutically acceptable excipient.
15. A recombinant AAV2 vector or pharmaceutical composition according to any of claims 1 to 14, for use in the treatment of a disorder in a subject.
16. The use of a recombinant AAV2 vector or pharmaceutical composition according to any of claims 1 to 14, in the manufacture of a medicament for the treatment of a neurological disorder wherein the neurological disorder is a neurodegenerative disease.
17. The use of a recombinant AAV2 vector or pharmaceutical composition according to any of claims 1 to 14, in the manufacture of a medicament for the treatment of an ocular disorder wherein the ocular disorder is glaucoma, retinitis pigmentosa, macular degeneration, retinoschisis or diabetic retinopathy.