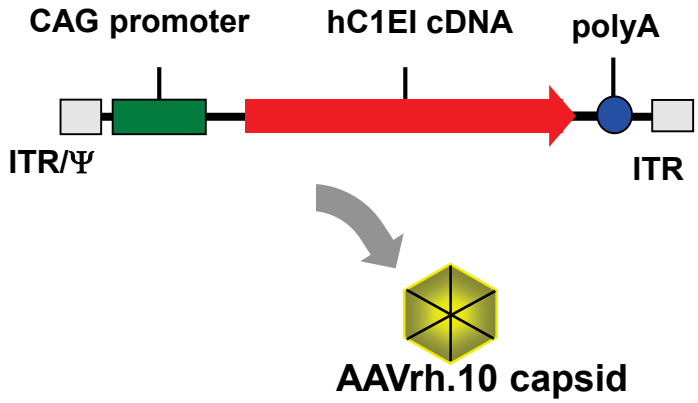
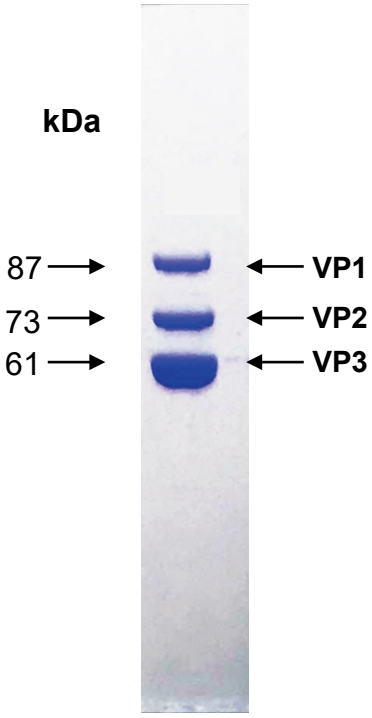
Supplemental Figure Legends

Supplemental Figure 1. AAVrh.10hC1EI. **A**. Diagram of the AAVrh.10hC1EI construct, including the AAV2 inverted terminal repeats (ITR), encapsidation signal (Ψ), CAG promoter, optimized hC1EI cDNA, and rabbit β- globin polyadenylation (polyA) signal. **B.** *In vitro* characterization of AAVrh.10hC1EI vector. The AAVrh.10hC1EI vector-was produced by co-transfection into human embryonic kidney 293T cells of the pAAV plasmid together with a plasmid carrying the AAV Rep proteins derived from AAV2 (needed for vector replication), the AAVrh.10 viral structural (Cap) proteins VP1, 2 and 3, which define the serotype of the produced AAV vector and the adenovirus helper functions of E2, E4 and VA RNA. Shown is an SDS-PAGE gel of the purified virus demonstrating the VP1, 2 and 3 capsid proteins. **C**. To assess the expression cassette, *in vitro* expression of hC1EI was evaluated in HEK293T cells transfected with either pAAV.CAG.hC1EI or control (pAAV-GFP) plasmids; 48 hr later, Western analysis was carried out on supernatants with anti-hC1EI antibody. **Lane 1 -** purified human C1EI protein (1 μg); **lane 2 -** supernatant, pAAVhC1EI transfection; and **lane 3 -** supernatant, pAAV-GFP transfection. Arrow, expected size for glycosylated hC1EI (105 kDa).

A. AAVrh.10C1EI vector



B. SDS-PAGE



C. *In vitro* expression