Beyond Biotech LLC (Beyond) developed a technical platform to design/construct rAAV vectors, manufacture high purity rAAV particles (Fig. AFM image of AAV particles), and quality control of vectors with step-by-step protocols and standard operating procedures, which would benefit our scientific community in the gene therapy field.

Beyond designed and constructed a series of optimized rAAV with EGFP / Flop / Cre / Firefly luciferase expression driven by either ubiquitous or tissues-specific promoters (including CB6, CMV, CAG, PGK, UBC, EF1a, hSyn, hRHO, MeCP2, etc). A small-scale manufacture and cell-based assays for the vector's potency show these rAAV vectors function well and hold great potency.

Furthermore, Beyond constructed rAAV-based spCas9 and all-in-one (both saCas9 and gRNA in one vector) saCas9 vectors, which may be beneficial Crispr/Cas9-based gene therapy research and application.

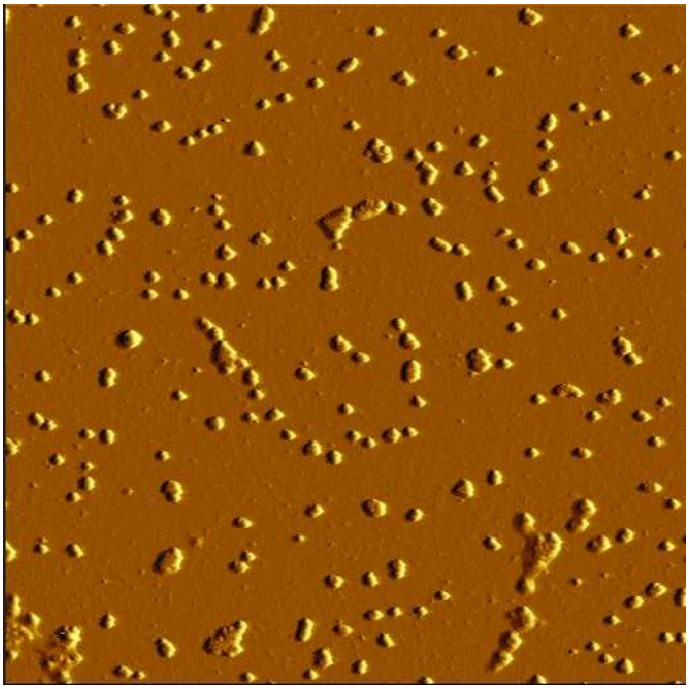

Fig. AFM image of AAV particles