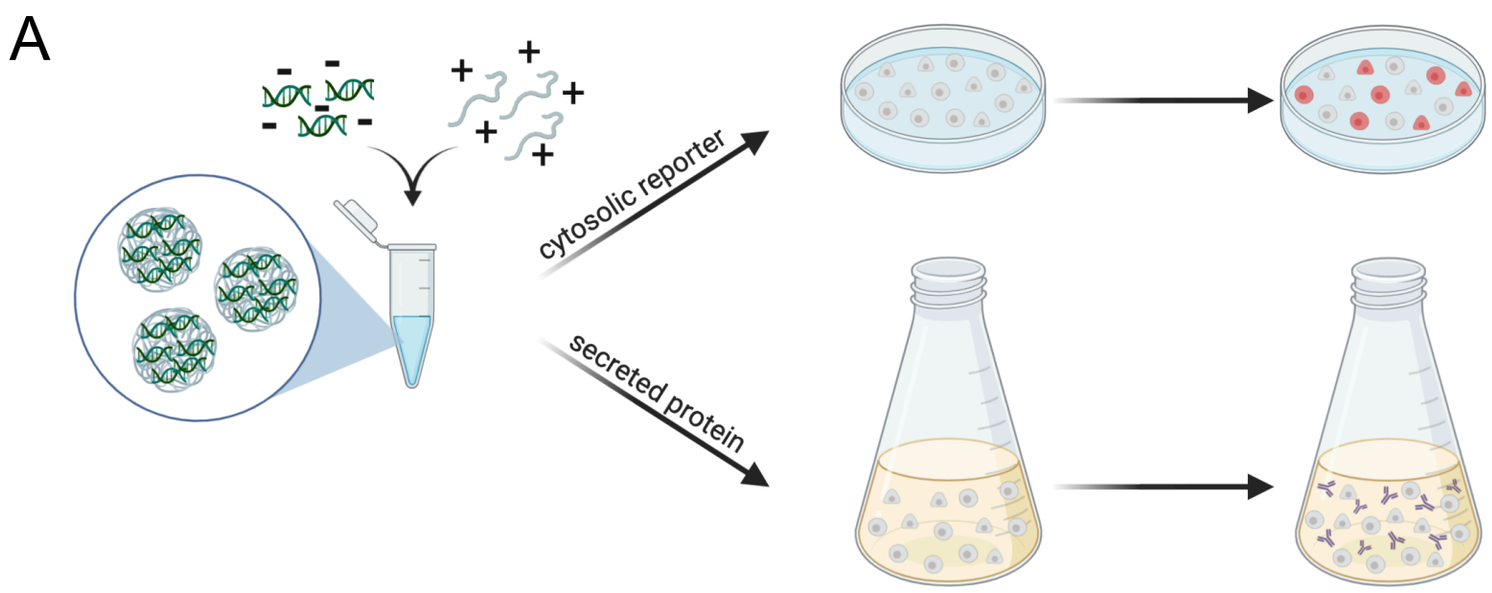

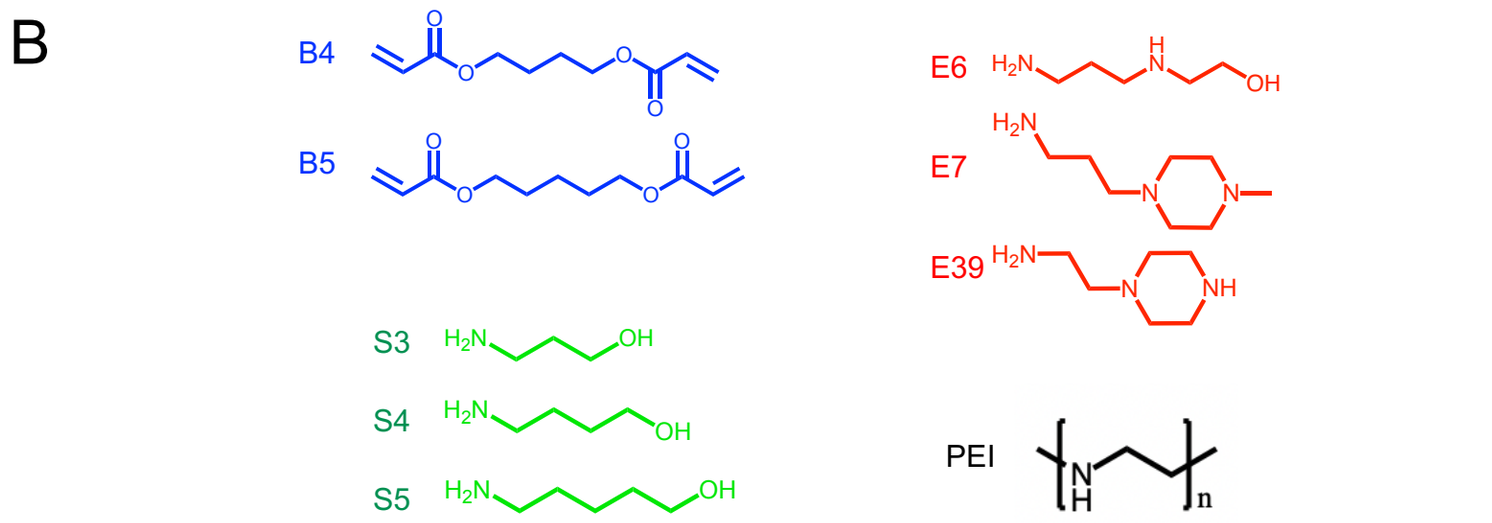

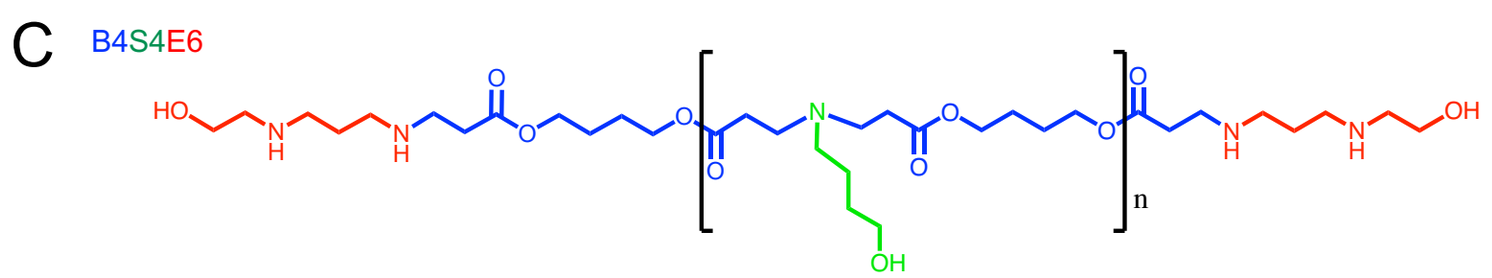

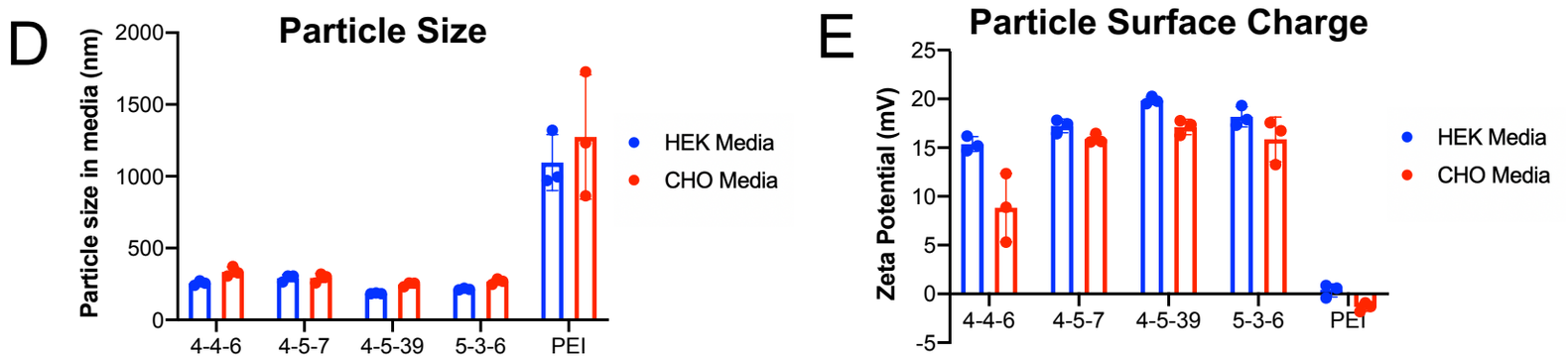

Figure 1. Protein production workflow and particle characterization. (A) Schematic of transient transfection workflow for cytosolic and secreted proteins. Plasmid DNA and polymer were combined to allow for nanoparticle self-assembly. Cells were transfected with plasmid DNA encoding a fluorescent reporter or a secreted protein. (B) PBAE and PEI monomer structures. Backbone monomers B4 and B5, side chain monomers S3-S5, endcap monomers E6, E7, and E39 used to synthesize PBAE polymers, and PEI 25 kDa. (C) Structure of B4S4E6 (4-4-6) polymer. Additional polymer structures are shown in Figure S1. (D) Nanoparticle size determined via dynamic light scattering (DLS) in HEK media (blue) or CHO media (red). (E) Zeta potential of nanoparticles in HEK media (blue) or CHO media (red). Error bars represent SD.