Electronic Supplementary Information for

Encapsulation of Gold Nanoparticles by Simian Virus 40 Capsids

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**Fig. S1** Agarose gel electrophoresis of 10-nm AuNPs (1), 10-nm 10T-AuNPs (2), and 10-nm mPEG750-AuNPs (3). AuNPs were loaded into 1.5% agarose gel in running buffer (45 mM tris, 45 mM boric acid, and 1 mM EDTA, pH 7.2). Electrophoresis was run for 30 min at 100 V.

**Fig. S2** Purified VP1 examined by SDS-PAGE
**Fig. S3** Images of SDGC tubes after the purification of 15-nm mPEG750-AuNPs and corresponding VLPs (A), 20-nm mPEG750-AuNPs and corresponding VLPs (B), 10-nm 10T-AuNPs and corresponding VLPs (C), 15-nm 10T-AuNPs and corresponding VLPs (D), and 20-nm 10T-AuNPs and corresponding VLPs (E).

**Fig. S4** TEM images of SV40-Au VLPs containing 15-nm mPEG750-AuNPs after purification by SDGC. Scale bar: 100 nm.

**Fig. S5** TEM images of SV40-Au VLPs containing 20-nm mPEG750-AuNPs after purification by SDGC. Scale bar: 100 nm.
Fig. S6 TEM images of SV40-Au VLPs containing 30-nm mPEG750-AuNPs after purification by SDGC. Scale bar: 100 nm.

Fig. S7 TEM images of SV40-Au VLPs containing 10-nm 10T-AuNPs after purification by SDGC. Scale bar: 100 nm.
**Fig. S8** TEM images of SV40-Au VLPs containing 15-nm 10T-AuNPs after purification by SDGC. Scale bar: 100 nm.

**Fig. S9** TEM images of SV40-Au VLPs containing 20-nm 10T-AuNPs after purification by SDGC. Scale bar: 100 nm.
**Fig. S10** TEM images of SV40-Au VLPs containing 30-nm 10T-AuNPs after purification by SDGC. Scale bar: 100 nm.

**Fig. S11** TEM images of assembly mixture of BSA and AuNPs. Scale bar: 200 nm. (A) 15-nm mPEG750-AuNPs; (B) 20-nm 10T-AuNPs.