

Intracellular Trafficking Network of Protein Nanocapsules: Endocytosis, Exocytosis and Autophagy

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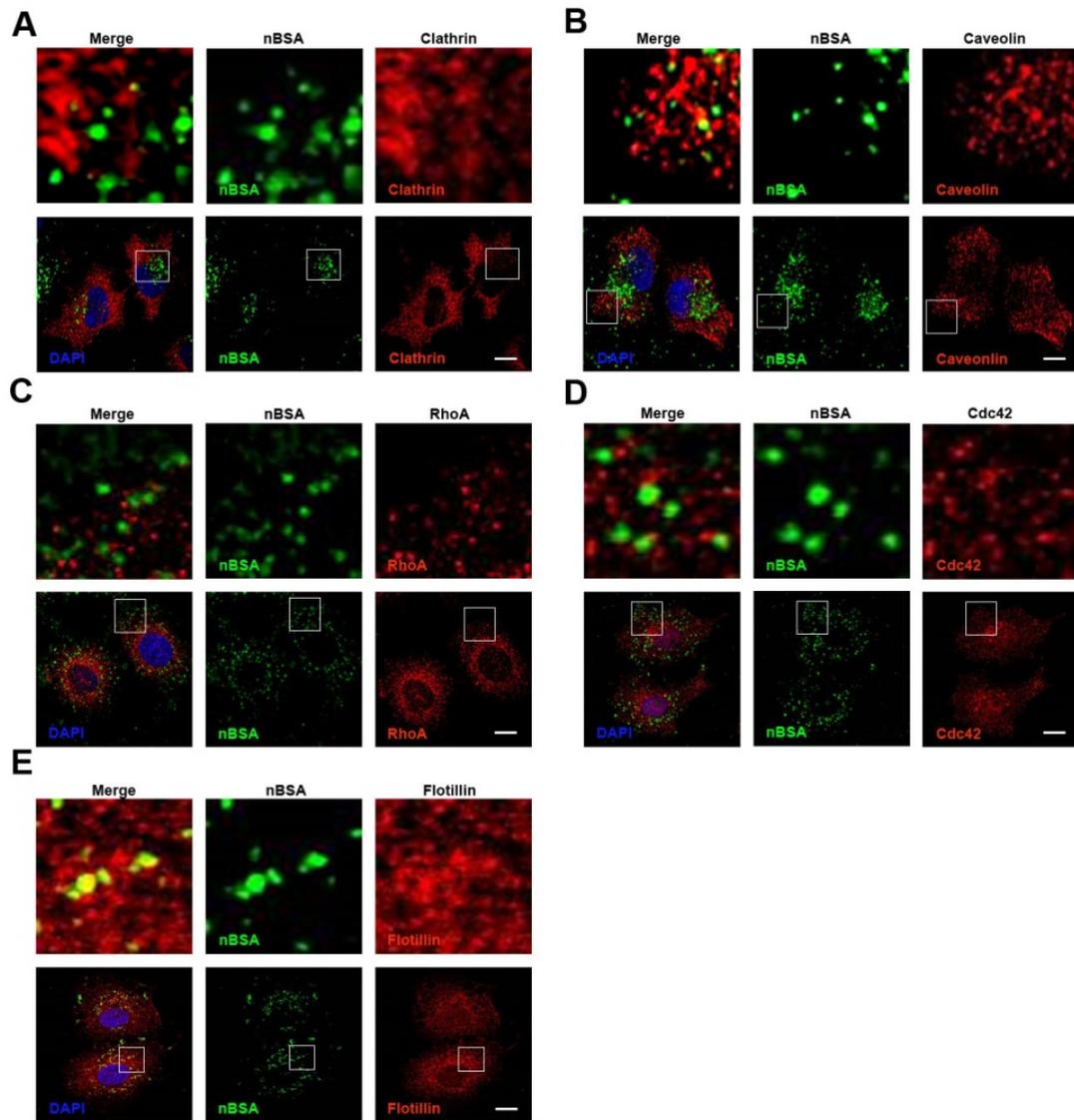


Fig. S1. Confocal images of MCF-7 cells, which were treated with 1 mg/mL FITC-labeled nBSA for 20 hours. Clathrin, Caveolin, RhoA, Cdc42 and Flotillin were detected with primary antibodies against Clathrin, Caveolin, RhoA, Cdc42 and Flotillin, respectively. (A-E) Scale bars: 10 μ m.

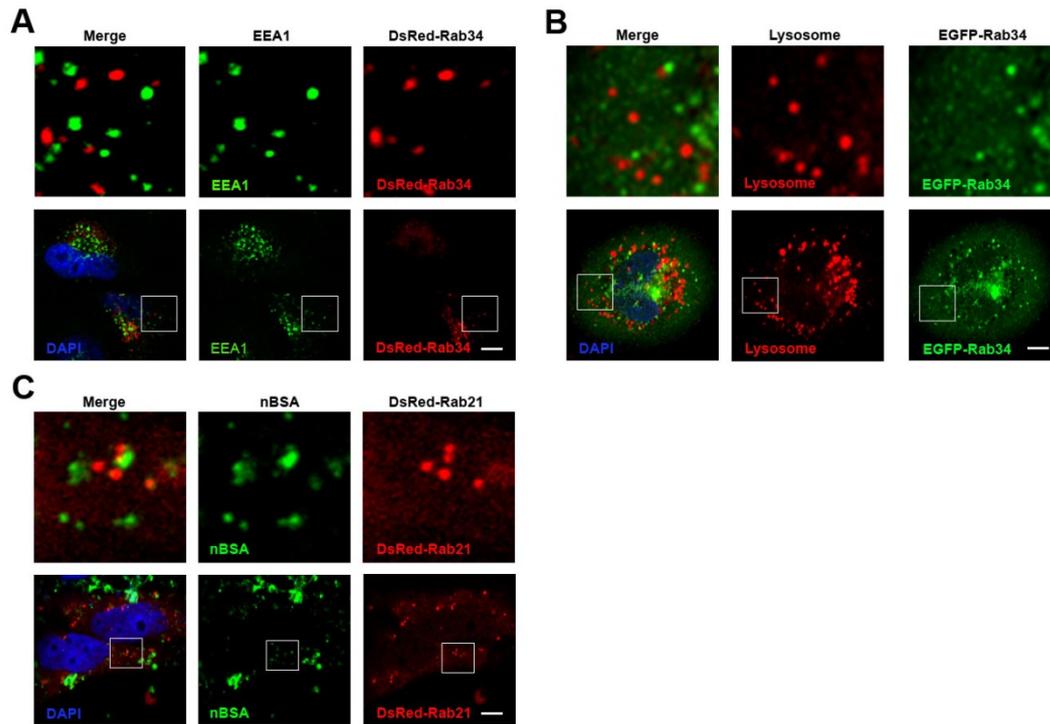


Fig. S2. (A) EEA1 was detected in DsRed-Rab34 transfected MCF-7 cells with a primary antibody against EEA1; (B) For lysosome detection, the MCF-7 cells were transfected with DsRed-Rab34, treated with 1 mg/mL FITC-labeled nBSA for 20 h, and then co-treated with Lyso-Tracker Red probes for 30 min. (C) DsRed-Rab21 transfected MCF-7 cells were then treated with 1 mg/mL FITC-labeled nBSA for 20 h. Scale bars: 10 μ m.

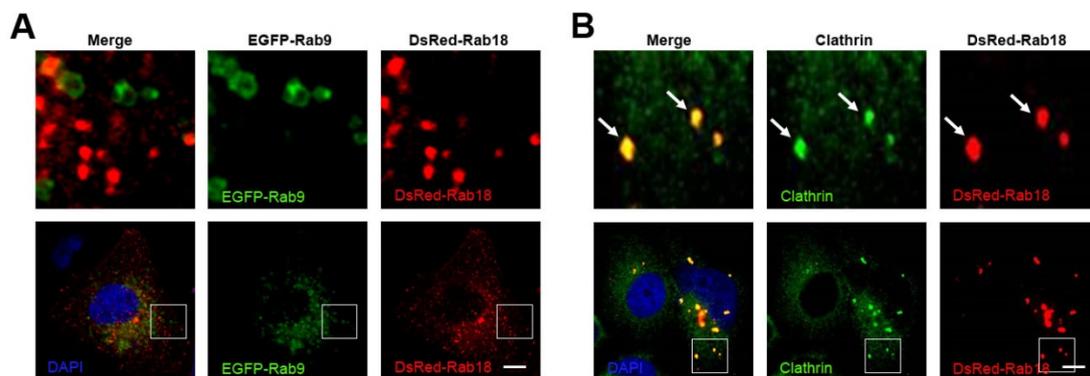


Fig. S3. (A) EGFP-Rab9 cells were co-transfected with DsRed-Rab18; (B) Clathrin was detected in DsRed-Rab18 transfected MCF-7 cells with a primary antibody against Clathrin. Scale bars: 10 μ m.

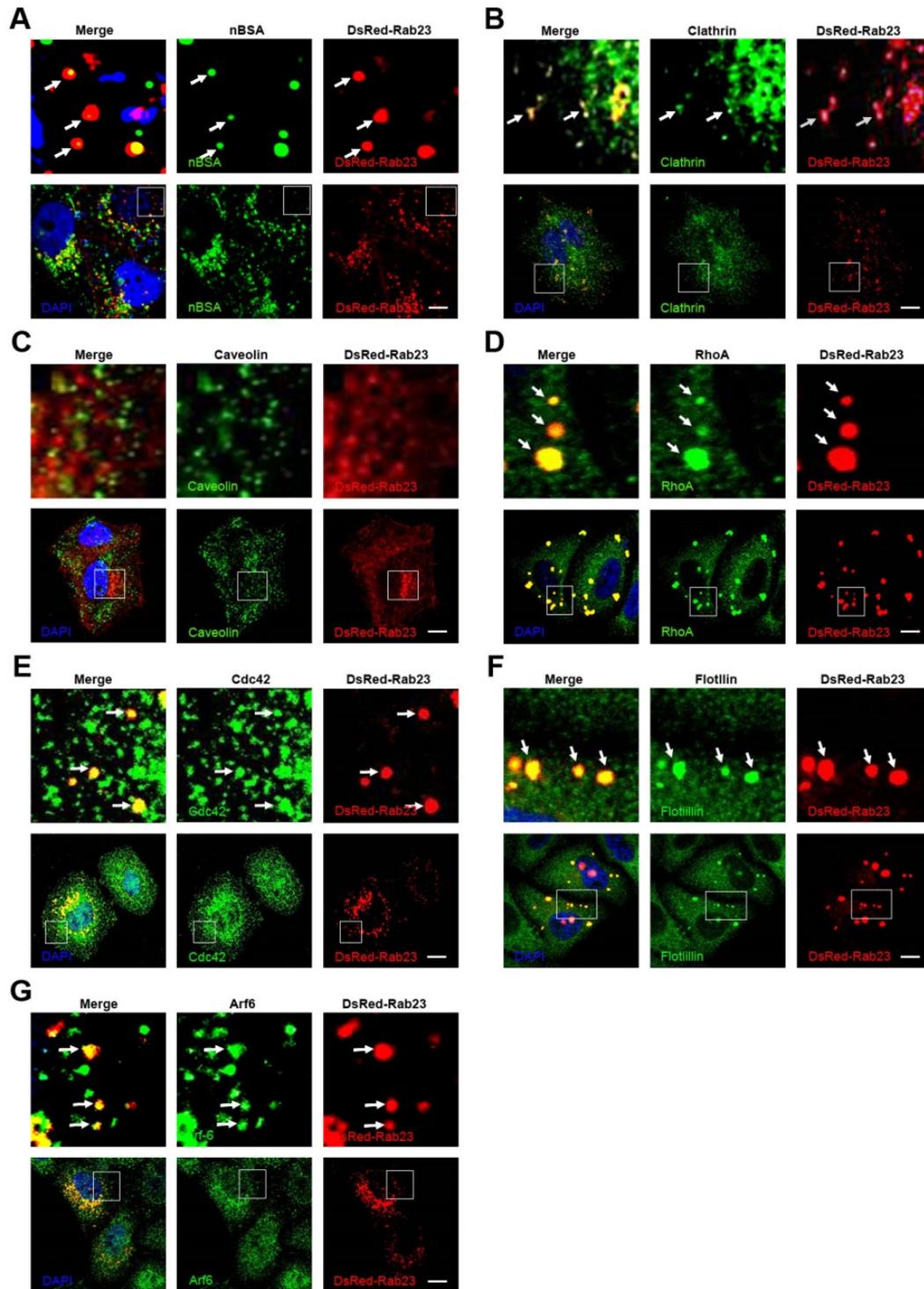


Fig. S4. (A) Confocal images of MCF-7 cells, DsRed-Rab23 transfected MCF-7 cells were treated with 1 mg/mL FITC-labeled BSA-nanocapsules for 20 h; (B-G) DsRed-Rab23 cells were queried by primary antibodies against Clathrin, Caveolin, RhoA, Cdc42, Flotillin and Arf-6, respectively. Scale bars: 10 μ m.

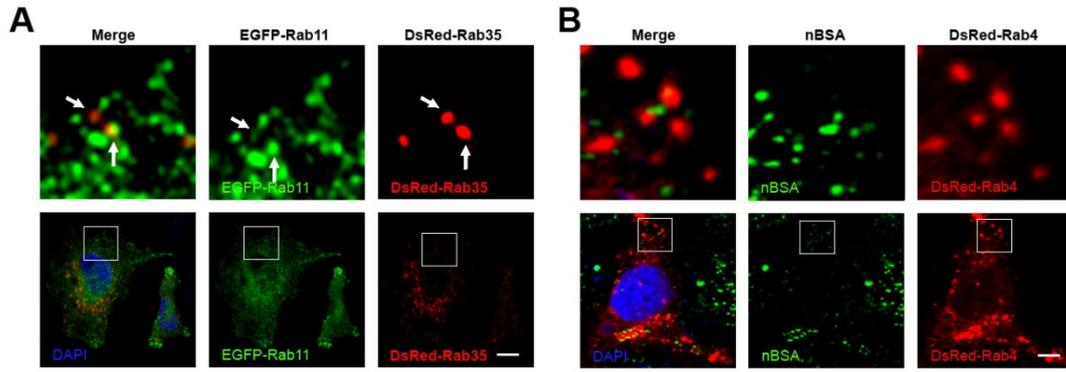


Fig. S5. (A) EGFP-Rab11 cells were co-transfected with DsRed-Rab35. (B) Confocal images of MCF-7 cells. DsRed-Rab4 transfected MCF-7 cells were treated with 1 mg/mL FITC-labeled BSA-nanocapsules for 20 h; Scale bars: 10 μ m

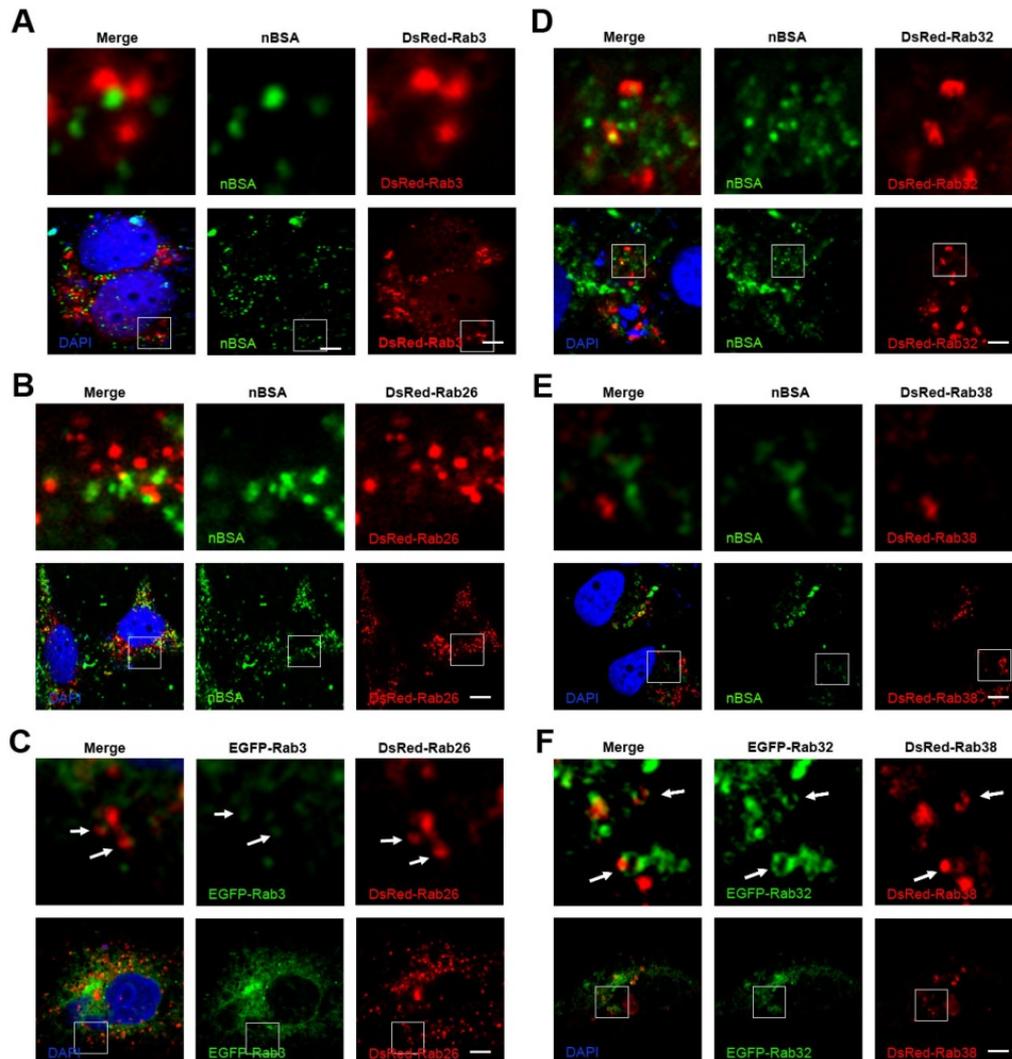


Fig. S6. (A-D) Confocal images of DsRed-Rab3, DsRed-Rab32, DsRed-Rab26 and

DsRed-Rab38 transfected MCF-7 cells treated with 1 mg/mL FITC-labeled BSA-nanocapsules for 20 h. (E) EGFP-Rab3 cells were co-transfected with DsRed-Rab26; (F) EGFP-Rab32 cells were co-transfected with DsRed-Rab38. Scale bars: 10 μ m.

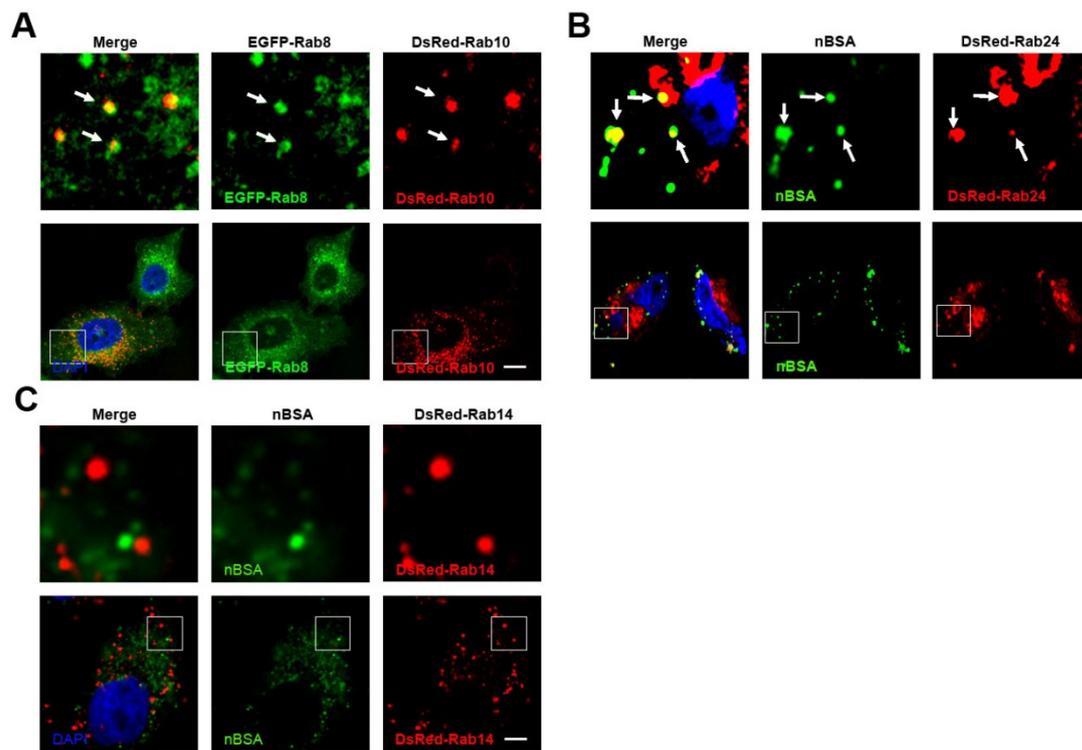


Fig. S7. (A) EGFP-Rab8 cells were co-transfected with DsRed-Rab10. (B-C) Confocal images of MCF-7 cells transfected with DsRed-Rab14 or Rab24 and then treated with 1 mg/mL FITC-labeled BSA-nanocapsules for 20 h. Scale bars: 10 μ m.

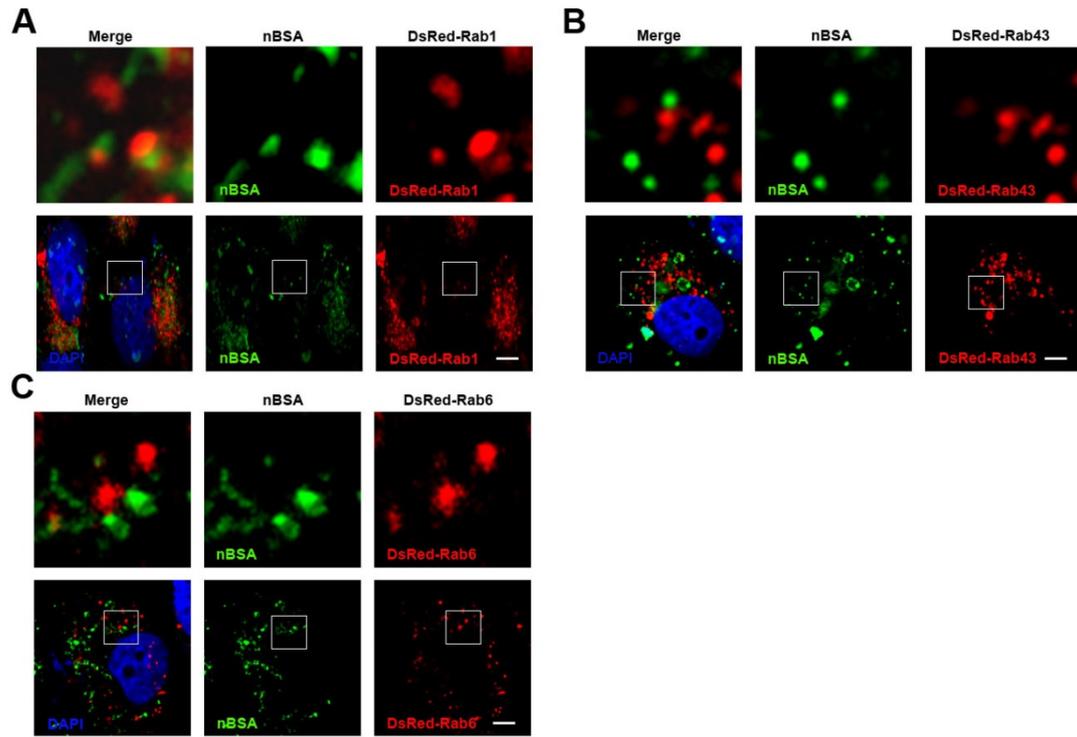


Fig. S8. (A-C) Confocal images of MCF-7 cells transfected with DsRed-Rab1, DsRed-Rab43, or DsRed-Rab6 and then, treated with 1 mg/mL FITC-labeled BSA-nanocapsules for 20 h. Scale bars: 10 μ m.

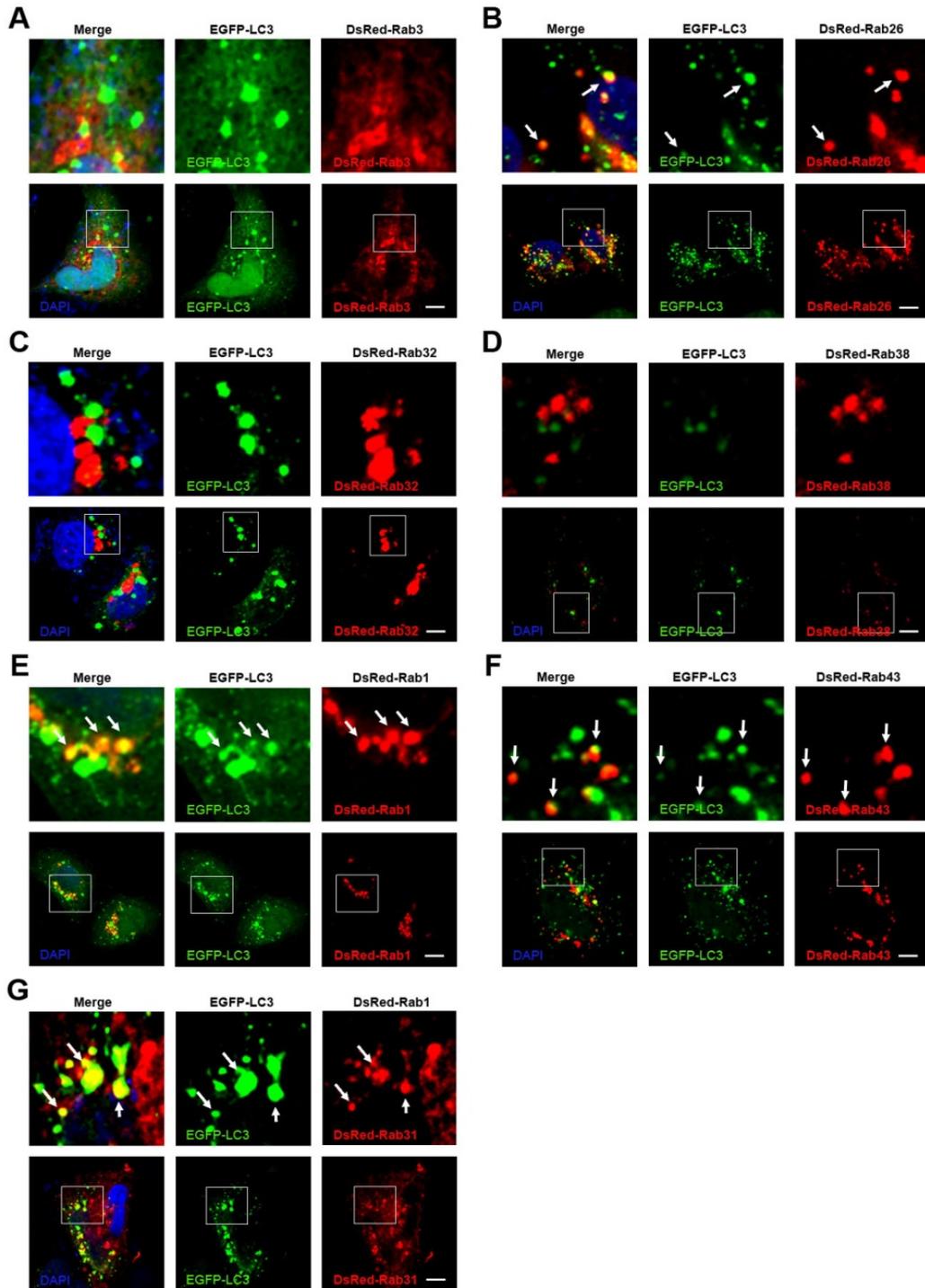


Fig. S9. (A-G) EGFP-LC3 cells were co-transfected with DsRed-Rab3, DsRed-Rab26, DsRed-Rab32, DsRed-Rab38, DsRed-Rab1 and DsRed-Rab31, respectively. Scale bars: 10 μm .