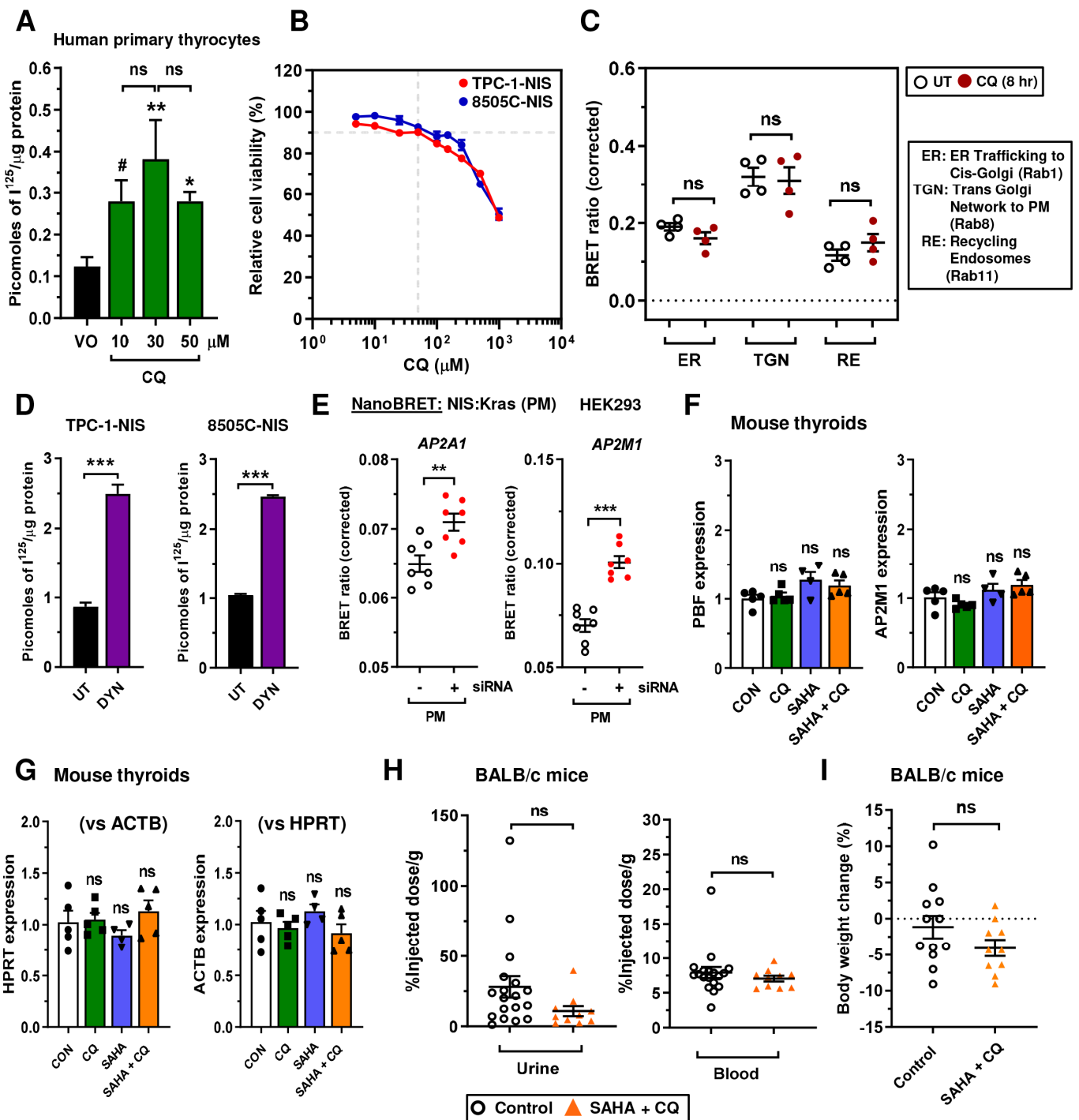


# SUPPLEMENTARY FIGURE S10



**Figure S10.** Biological effects and validation of targeting endocytic pathways. **A**, Radioiodide uptake of human primary thyrocytes treated with CQ at the indicated dose vs vehicle only (VO). Data presented as mean  $\pm$  S.E.M., one-way ANOVA followed by Tukey's multiple comparison test (\* $P < 0.05$ ; \*\* $P < 0.01$ ) or unpaired two-tailed t-test (# $P < 0.05$ ). **B**, Cell viability of TPC-1-NIS and 8505C-NIS cells treated with CQ for 8 hours at the indicated dose ( $n = 3$ ). CQ dose of 50  $\mu\text{M}$  is highlighted (dashed grey lines). **C**, Profiling subcellular changes of NIS using the NanoBRET assay in CQ-treated HeLa cells. HeLa cells were transiently transfected with NIS tagged with NLuc, and the subcellular markers Rab1 (ER trafficking to cis-golgi), Rab8 (Trans golgi network to PM) or Rab11 (Recycling endosomes) tagged with Venus. **D**, RAI uptake in TPC-1-NIS and 8505C-NIS cells following Dynasore (DYN) treatment. **E**, NanoBRET evaluation of NIS PM localisation in HEK293 cells transfected with siRNA specific for indicated AP2 genes. **F**, PBF and AP2M1 mRNA levels in thyroid glands dissected from WT BALB/c mice administered with CQ and SAHA either alone or in combination. **G**, Same as (F) but with HPRT and ACTB mRNA levels. **H**, Technetium-99m pertechnetate levels in urine and blood harvested from WT BALB/c mice administered with CQ and SAHA either alone or in combination. **I**, Body weight change (%) in WT BALB/c mice administered with a combination of CQ and SAHA ( $n = 10$ ) versus controls ( $n = 12$ ). Data presented as mean  $\pm$  S.E.M., ns, not significant; \* $P < 0.05$ ; \*\*\* $P < 0.001$ .