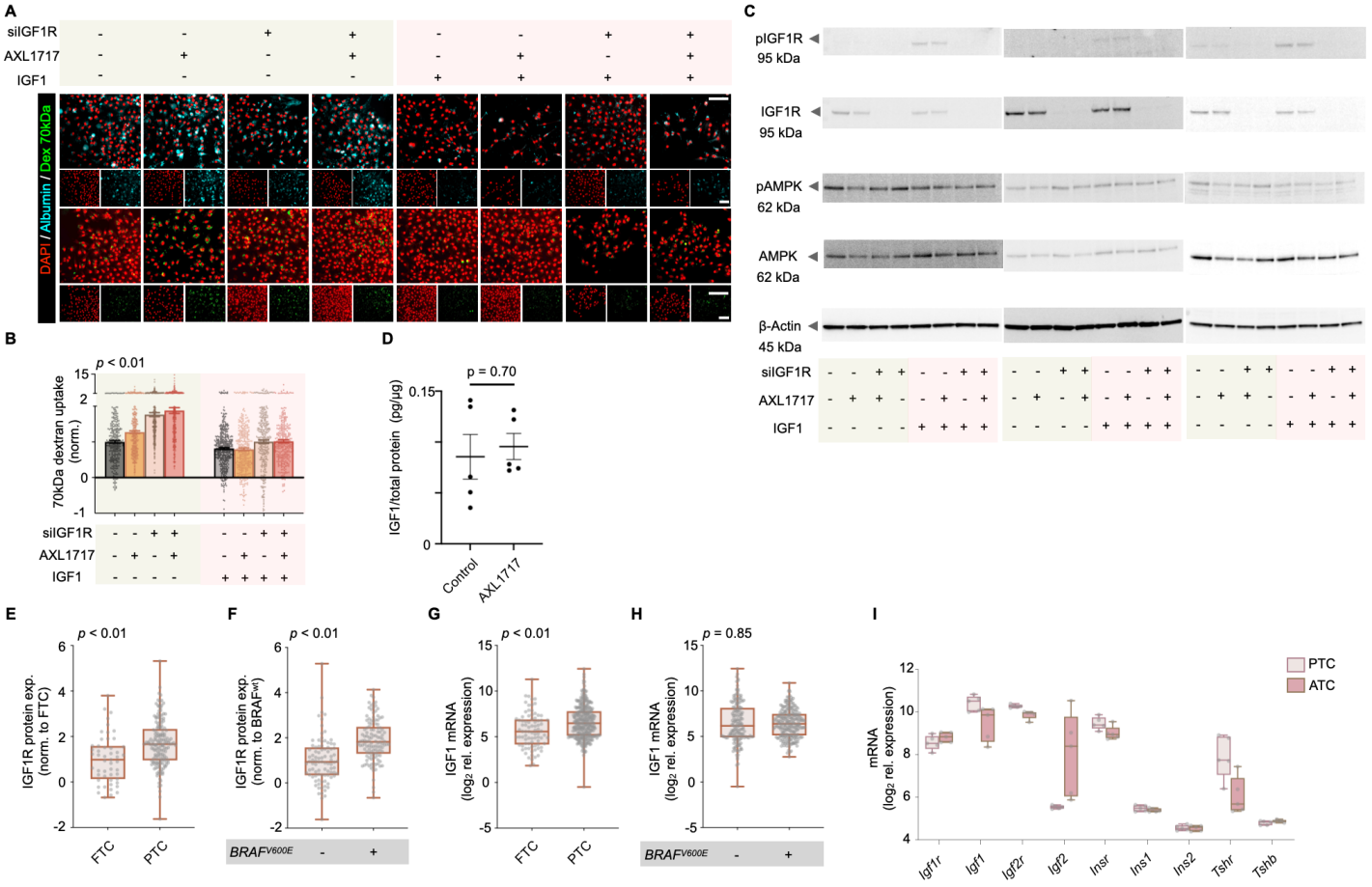

Supplementary Figure S5. IGF1R inhibition augments macropinocytosis and is blocked by IGF1. 8505c cells were treated with IGF1R-targeted pooled small interfering RNA (siRNA) or non-specific siRNA for 48h, followed by AXL1717 or DMSO for 24h, and with or without IGF1 for another 4h. **A-B**, Representative images of 4h albumin and dextran uptake (**A**, scale bar, 100 µm) and quantification (**B**, means ± s.e., from n ≥ 258 cells per cond., two-way ANOVA) of dextran uptake in 8505c cells (control, transfected with non-specific siRNA and treated with DMSO). Experiment matches Fig. 5. **C,** Phosphorylated IGF1R(p-IGF1R, p-Tyr1135) and total IGF1R, phosphorylated AMPK(p-AMPK, p-Thr172) and total AMPK were measured in 8505c cells. β-Actin was used as a loading control. Matches replotted representative data and summary statistics in Fig. 5. **D,** IGF1 concentration in TBP3743 tumors: TBP3743 tumor-bearing mice were treated with two doses of vehicle or AXL1717 for 48h in total. IGF1 was detected in excised tumor tissue by an IGF1 quantikine ELISA kit (data are means ± s.e., n = 5 per cond., two-tailed t test). **E-I,** Protein levels of IGF1R (**E-F**) and mRNA expression of *IGF1* (**G-H**) among patients with thyroid cancer, separated by FTC or PTC diagnosis (**E** and **G**) or by *BRAF* mutation status (**F** and **H**). Data were from 393 patients from The Cancer Genome Atlas (TCGA) database and analyzed via cBioPortal. Data are shown medians ± interquartile range; two-tailed t test. **I**, *Igf1r*, *Igf1*, *Igf2r*, *Igf2*, Insulin receptor(*Insr*), Insulin(*Ins1* and *Ins2*), thyroid stimulating hormone receptor (*Tshr*) and thyroid stimulating hormone (*Tsh*) gene expression from *BRAF*^{V600E} PTC and ATC tumor bulk tissue in genetically engineered mice. Data are shown with medians ± interquartile range, n=5 mice, from the published study (39).