



**Figure S5. c-Abl affects endocytic trafficking.** (a) (top) Early endosome size was quantitated on a confocal microscope. (a) vehicle,  $n=63$  cells; imatinib,  $n=76$ .  $***p<0.001$  by t-test. (bottom) EEA1 staining distribution (percent of cells with staining in a single perinuclear region vs. distributed all over the cell). Eight fields were analyzed: Scr,  $n=128$  cells; c-Abl,  $n=117$ ; Arg=104.  $p<0.001$  with a one-way Anova followed by Tukey posthoc tests (Scr vs. c-Abl, c-Abl vs. Arg,  $p<0.01$ ). (b) 435s cells transfected with siRNAs were stained with Rab5 antibody. (c) Quantitation of Rab7 and LAMP1 staining (photon count). For Rab7, Scr,  $n=29$  cells; c-Abl,  $n=34$ ; Arg,  $n=27$ .  $*p=0.028$  by one-way Anova and Tukey posthoc test (c-Abl vs. Arg,  $p<0.05$ ). For LAMP1, Scr,  $n=33$  cells; c-Abl,  $n=39$ ; Arg,  $n=38$ .  $***p<0.001$  with a one-way Anova followed by Tukey posthoc tests (Scr vs. c-Abl,  $p<0.05$ ). (d) 435s cells were treated with chloroquine ( $100\mu\text{M}$ ; 4h), stained with EEA1 and NM23-H1 antibodies, and counterstained with DAPI. (e) 435s cells were transfected with scrambled or NM23-H1 siRNAs, and stained with NM23-H1 antibody (sc-465, used for immunofluorescence), followed by fluorescent-conjugated secondary antibodies, and counterstained with DAPI.