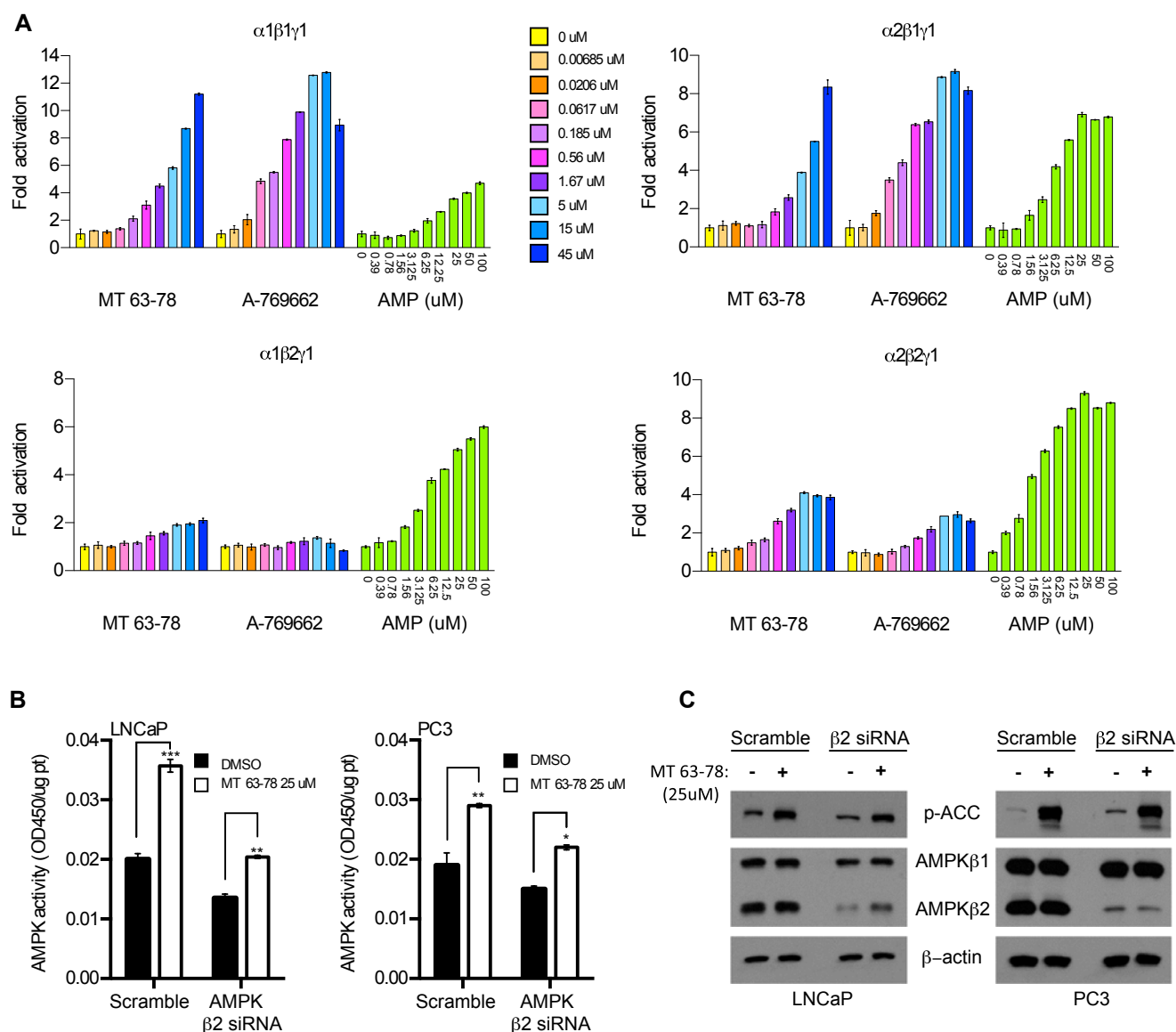




Supporting Information Fig 4. Characterization of MT 63-78 specificity.

A. *In vitro* activity of four different recombinant AMPK heterotrimers ($\alpha 1\beta 1\gamma 1$, $\alpha 2\beta 1\gamma 1$, $\alpha 1\beta 2\gamma 1$, $\alpha 2\beta 2\gamma 1$), following 30-min treatment with MT 63-78, A-769662, and AMP at the indicated concentrations. AMPK activity was measured using alpha screen assay, as as described in Supporting Materials and Methods. Results are expressed as fold activation of basal level (DMSO treatment) set as 1.

B. AMPK activity in LNCaP and PC3 cells transfected with AMPK $\beta 2$ subunit siRNA, following 30-min treatment with MT 63-78 (MT) or DMSO. AMPK activity was measured with CycLex AMPK Kinase Assay, as described in Supporting Materials and Methods. Results are the mean of two independent samples. One-way ANOVA test, followed by Bonferroni post hoc test for multiple comparisons was performed and adjusted p values were calculated (LNCaP scramble: ***p=0.0002 MT vs DMSO. LNCaP $\beta 2$ siRNA: **p=0.0058 MT vs DMSO. PC3 scramble: **p=0.0059 MT vs DMSO. PC3 $\beta 2$ siRNA: *p=0.029 MT vs DMSO.

C. Western blotting shows the rate of AMPK $\beta 2$ silencing and ACC phosphorylation in $\beta 2$ knockdown cells in the presence or absence of MT 63-78.