



Supplementary Figure 1. AMPK α 1(E471G/E474A/K476A) is active in subunit interactions, kinase activity, and modulation of kinase activity by adenine nucleotides and glycogen. (A) AMPK α 1(E471G/E474A/K476A) forms a stoichiometric complex with the β 2- and γ 1-subunits. (B) AMPK wildtype (WT) and AMPK α 1(E471G/E474A/K476A) (mut) kinase activities in the presence and absence of allosteric modulators. Left panel: Reaction with 1 μ M non-phosphorylated WT or mutant human $\alpha_1\beta_2\gamma_1$ AMPK; right panel: reaction with 10 nM phosphorylated human $\alpha_1\beta_2\gamma_1$ AMPK. Numbers below lanes indicate relative densitometric values. Note that allosteric regulation is more pronounced in non-phosphorylated AMPK as previously described. St: Protein standards, with molecular weight indicated in kDa.