



**Figure S1. Phosphorylation of key intracellular signalling molecules in response to blue light in cells expressing Opto-mFGFR1.** (left) Phosphorylation of ERK, AKT and PLCγ1 in HEK293 cells transiently transfected with Opto-mFGFR1. (right) Phosphorylation of FRS2-RFP in HEK293 cells transiently transfected with Opto-mFGFR1 and FRS2-RFP. Cells were stimulated with blue light for 5 min. Light intensity was ~2.5 μW/mm<sup>2</sup>.