



**S8 Fig. Substitution of Arg<sup>656</sup> residue did not affect the stability of the recombinant RavS protein *in vitro* and *in vivo*.** (a), R656A substitution did not affect the thermal stability of recombinant DHP-CA protein of RavS. Thermal stability of DHP-CA or DHP-CA<sup>R656A</sup> was tested using Thermal shift assay (TSA). Three independent experiments were performed and a representative result is shown. The average and the standard deviation of three midpoints of melt curves were displayed. (b), R656A substitution did not affect the autokinase activity of RavS<sup>ΔN</sup>. RavS<sup>ΔN</sup> or RavS<sup>ΔN(R656A)</sup> autophosphorylates in the presence of [ $\gamma$ -<sup>32</sup>P]ATP at room temperature for various minutes. *In vitro* phosphorylation assay was used to measure the autokinase activity. The experiment was repeated for three times. (c), ravS<sup>R656A</sup> point mutation did not affect the stability of RavS in cell. Western blotting was used to detect the RavS. Samples were separated on 8% SDS-PAGE gel. Each experiment was repeated independently three times.