



Figure S5: The interaction of RACK1 and PDE4D *in vitro*. **(A)** The combination of His-PDE4D and GST-RACK1 was incubated for 6 h at 4 °C with end-over-end mixing. Pull-down and western blotting were performed to detect the interaction between PDE4D and RACK1. **(B)** HEK293A cell lysates were incubated with GST-RACK1 for 6 h at 4 °C with end-over-end mixing. In HEK293A cell extracts, the PDE4D levels that interacted with GST-RACK1 were pulled down using the glutathione-agarose beads and were detected by performing western blotting. **(C)** HEK293A cell lysates were incubated with His-PDE4D for 6 h at 4 °C with end-over-end mixing. In HEK293A cell extracts, the RACK1 levels that interacted with His-PDE4D were pulled down using the His-tag purification beads and were detected by performing western blotting. GST proteins, His-tag purification beads, or glutathione-agarose beads were individually used with cell lysates as the control group.