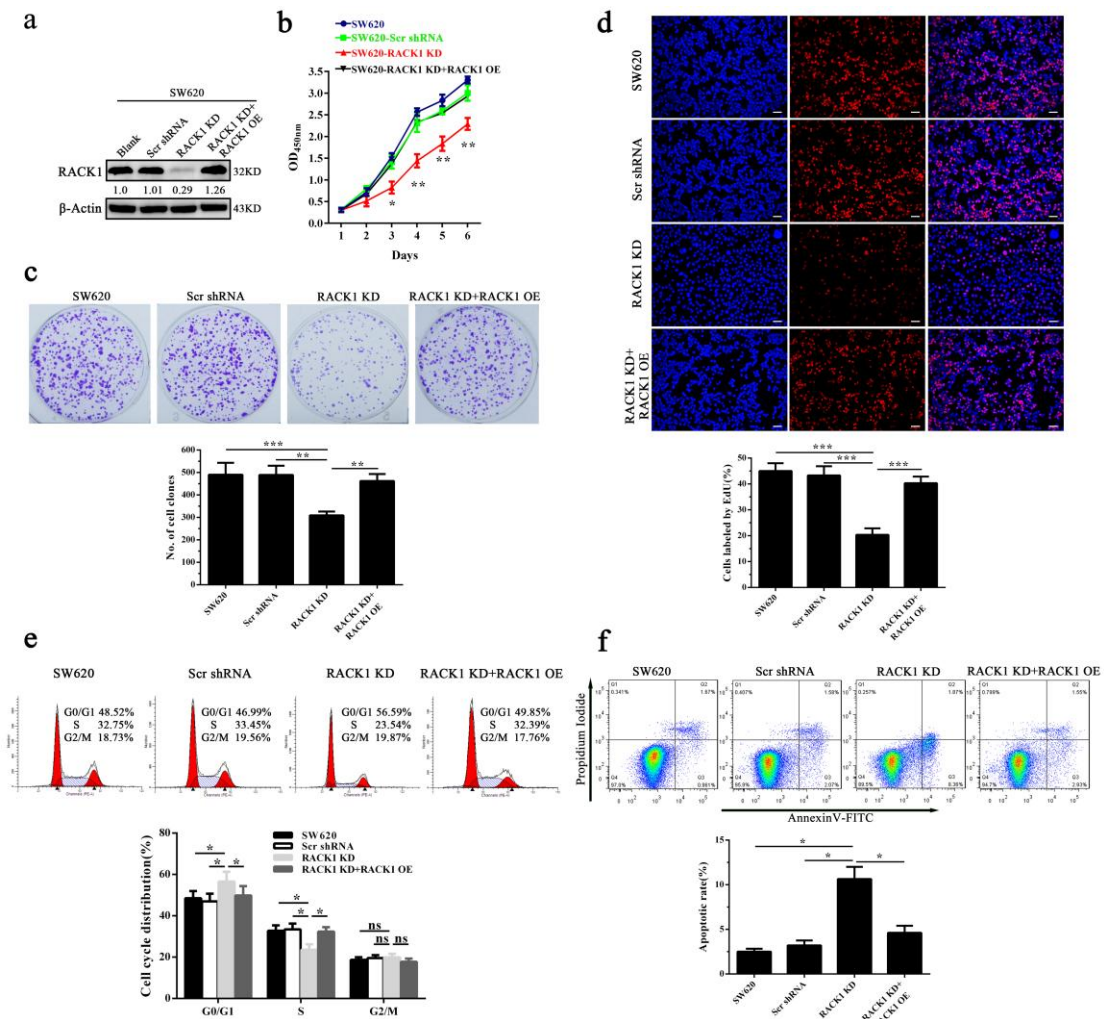


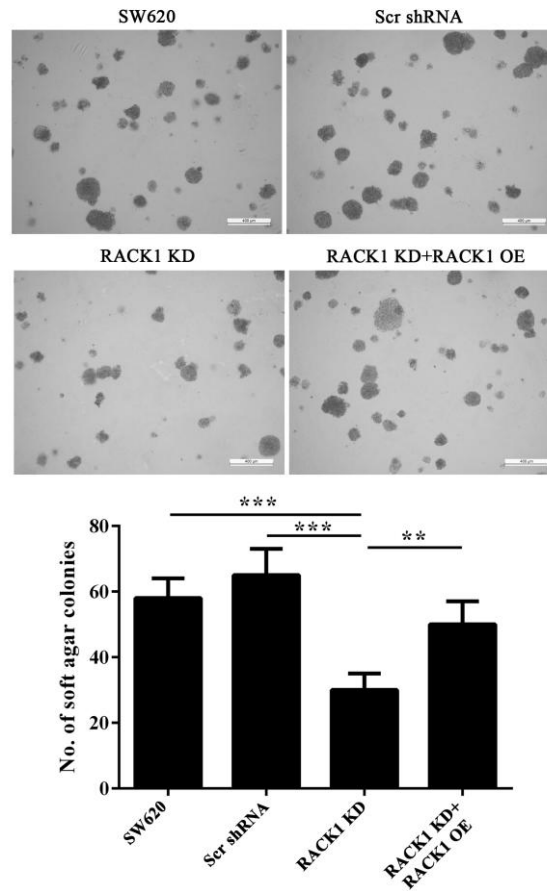
**Supplementary Table S1. The expression level of RACK1 in the colon epithelial carcinogenic process**

<b>Expression level</b>	<b>NCM (n, %)</b>	<b>Polyp (n, %)</b>	<b>Adenoma (n, %)</b>	<b>Adenocarcinoma (n, %)</b>	<b>LNM (n, %)</b>
Low (0-3)	56(88.9)	40(66.7)	29(48.3)	60(33.3)	6(15.0)
High (4-6)	79(11.1)	20(33.3)	31(51.7)	120(66.7)	34(85.0)
Sum	63	60	60	180	40

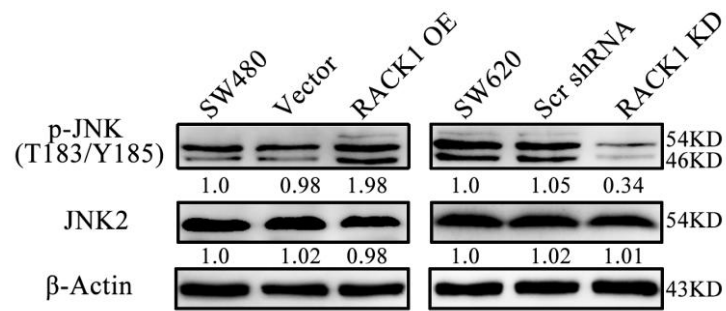
NCM, normal colon mucosa; LNM, lymph node metastasis  
 $\chi^2$  test. The overall difference:  $P < 0.001$ ; NCM vs. Polyp:  $P < 0.01$ ; Polyp vs. Adenoma:  $P < 0.05$ ; Adenoma vs. Adenocarcinoma:  $P < 0.05$ ; Adenocarcinoma vs. LNM:  $P < 0.05$ .



**Supplementary Figure S1. Reexpression of RACK1 rescues cell proliferation and apoptosis in the RACK1 KD SW620 cells.** (a) Western blot analysis showing the expression levels of RACK1 in the SW620-RACK1 KD cells [shRNA targeting the 3'UTR (5'-GTAAAGCTCTGCCATAAACTT-3') of human RACK1 transcript] transfected with lentiviral vector OE expressing RACK1 ORF and its control cells. Analysis of cell proliferation by CCK-8 (b), plate clone formation (c) and EdU incorporation (d) assay in the SW620-RACK1 KD cells transfected with lentiviral vector expressing RACK1 ORF and its control cells. Analysis of cell cycle distribution (e) and cell apoptosis (f) by flow cytometry in the SW620-RACK1 KD cells transfected with lentiviral vector expressing RACK1 ORF and its control cells. Three experiments were done; Means, SDs, and statistical significance are denoted; \*,  $P < 0.05$ ; \*\*,  $P < 0.01$ ; \*\*\*,  $P < 0.001$ ; ns, no significance. Scale bars = 200 $\mu$ m.



**Supplementary Figure S2. Reexpression of RACK1 rescues cell anchorage independent growth in the RACK1 KD SW620 cells.** Analysis of cell anchorage independent growth by soft agar colony formation assay in the SW620-RACK1 KD cells transfected with lentiviral vector expressing RACK1 ORF and its control cells. Three experiments were done; Means, SDs, and statistical significance are denoted; \*\*,  $P < 0.01$ ; \*\*\*,  $P < 0.001$ . Scale bars =  $400\mu\text{m}$ .



**Supplementary Figure S3. RACK1 activates JNK signaling in the colon cancer cells.** Western blot analysis showing the expression levels of phospho-JNK-1/2 and JNK-2 in the SW480-RACK1 OE cells, SW620-RACK1 KD cells and their control cells.