Figure S1. Sequencing traces of RARG CRISPR (EDITED SAMPLE is referred to sequence of RARG CRISPR and CONTROL SAMPLE is represented the reference sequence of control).



Figure S2. ATRA induces the apoptosis of KKU-100 cells by ROS-dependent and ROS-independent mechanisms. Cells were pre-treated with ROS scavengers (NAC or TEMPOL) and further incubated with 1.25, 2.5 and 5 μ M ATRA for 48 h. Annexin V-PE/7-AAD staining and flow cytometry was performed to detect apoptotic cell death. Data from two independent experiments are presented. ATRA, all-*trans*-retinoic acid.



Figure S3. ATRA induces the apoptosis of KKU-213B cells by ROS-dependent and ROS-independent mechanisms. Cells were 3-h pre-treated with ROS scavengers (NAC or TEMPOL) and further incubated with 1.25, 2.5 and 5 μ M ATRA for 48 h. Annexin V-PE/7-AAD staining and flow cytometry was performed to detect apoptotic cell death. Data from two independent experiments are presented. ATRA, all-*trans*-retinoic acid.



KKU-213B