

Figure S1. RHOA mutations in digestive tract cancer cell lines. (A) Mutations in RHOA detected by Sanger sequencing. Arrows indicate mutations. (B) Electrophoresis of the amplified products of DNA isolated from CCK-81 cells (right) and a control human genomic DNA (left) using mutant specific primers for *RHOA*^{R5Q} and *RHOA*^{Y42C}, wild-type specific primers, and intron primers. (C) Sanger sequencing of the compound mutation of *RHOA*^{R5Q} and *RHOA*^{Y42C} in CCK-81, in which each mutant strand and wild-type strand was separately analyzed. Arrows indicate mutations. IF, intron forward; IR, intron reverse; MF, mutant specific forward; MR, mutant specific reverse; NC, negative control; WF, wild-type specific forward; WR, wild-type specific reverse.

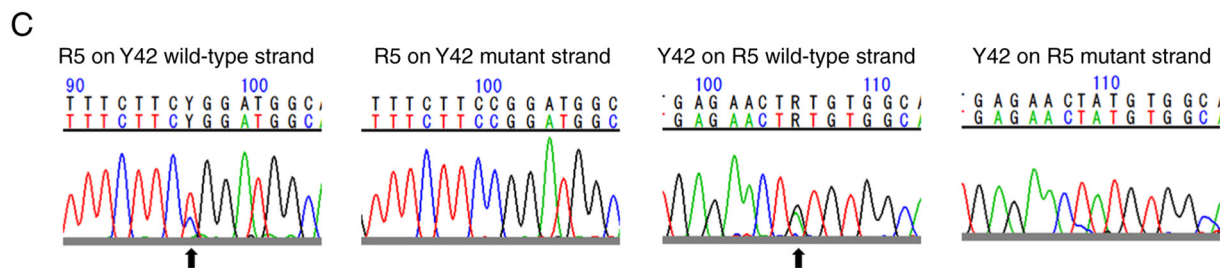
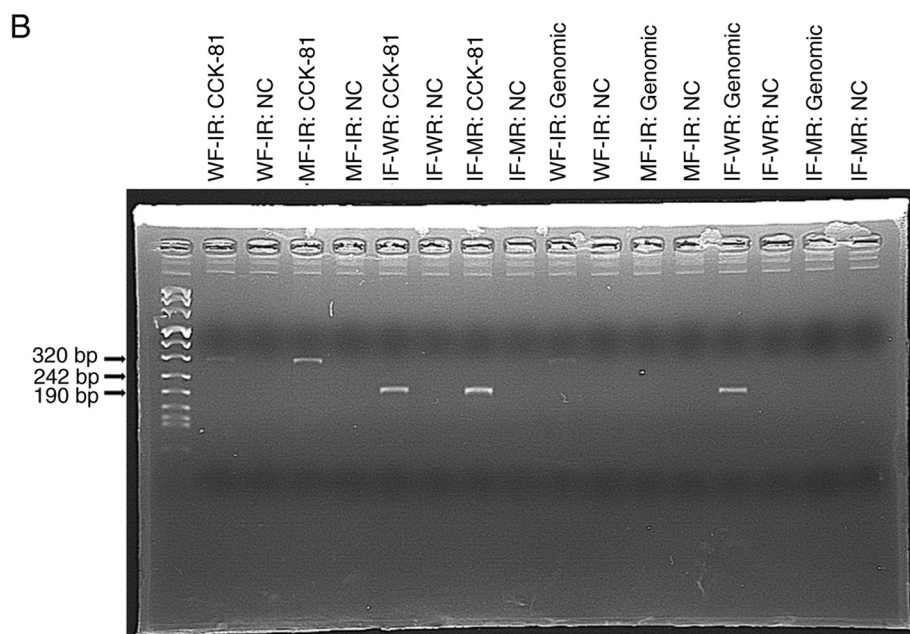
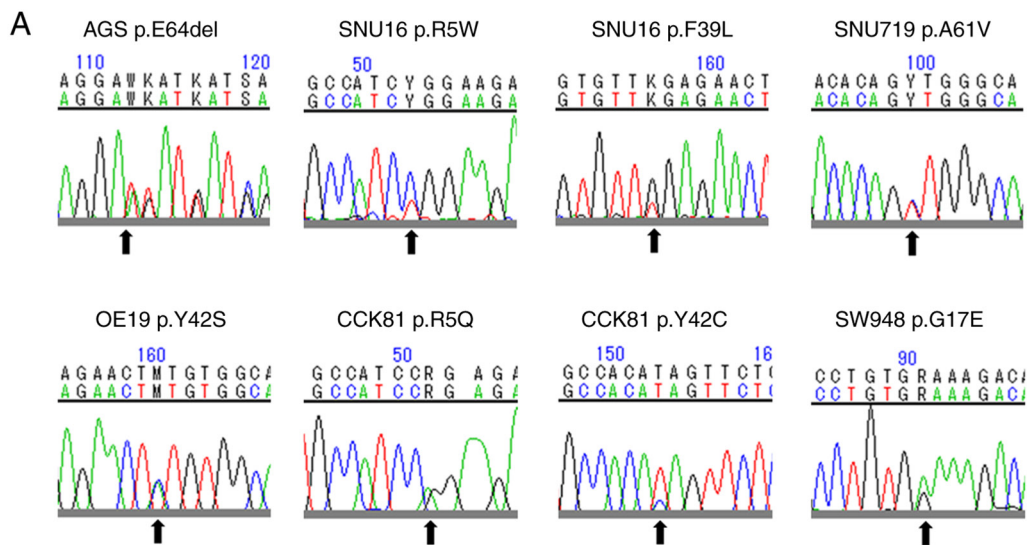
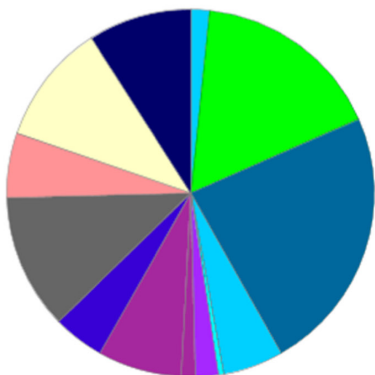


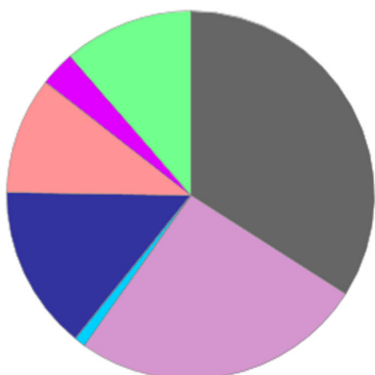
Figure S2. Pie charts indicate Gene Ontology analysis of significantly altered genes after RHOA knockdown. Ontologies are listed in Supplementary Table SV. These figures were generated by using PANTHER Classification System (<http://pantherdb.org/>).

PANTHER GO-Slim biological process
Total # Genes: 115 Total # process hits: 244



- [Biological adhesion \(GO:0022610\)](#)
- [Biological regulation \(GO:0065007\)](#)
- [Cellular process \(GO:0009987\)](#)
- [Developmental process \(GO:0032502\)](#)
- [Growth \(GO:0040007\)](#)
- [Immune system process \(GO:0002376\)](#)
- [Interspecies interaction between organisms \(GO:0044419\)](#)
- [Localization \(GO:0051179\)](#)
- [Locomotion \(GO:0040011\)](#)
- [Metabolic process \(GO:0008152\)](#)
- [Multicellular organismal process \(GO:0032501\)](#)
- [Response to stimulus \(GO:0050896\)](#)
- [Signaling \(GO:0023052\)](#)

PANTHER GO-Slim molecular function
Total # Genes: 115 Total # function hits: 97



- [Binding \(GO:0005488\)](#)
- [Catalytic activity \(GO:0003824\)](#)
- [Molecular adaptor activity \(GO:0060090\)](#)
- [Molecular function regulator \(GO:0098772\)](#)
- [Molecular transducer activity \(GO:0060089\)](#)
- [Structural molecule activity \(GO:0005198\)](#)
- [Transporter activity \(GO:0005215\)](#)

PANTHER GO-Slim cellular component
Total # Genes: 115 Total # component hits: 118



- [Cellular anatomical entity \(GO:0110165\)](#)
- [Intracellular \(GO:0005622\)](#)
- [Protein-containing complex \(GO:0032991\)](#)