Interruption of RNA processing machinery by a small compound 1-[(4-chlorophenyl)methyl]-1H-indole-3-carboxaldehyde (oncrasin-1)

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Legend for Supplemental Figures.

Supplemental Figure 1. Testing on specificity of PKCt antibody. Parental 293 cells, and 293 cells transfected with a control plasmid (pCMV-LacZ) or PKCt-expressing plasmid (pCMV-PKCt) were subjected to a Western Blot analysis. The antibody can specifically detect PKCt bands with minimal background.

Supplemental Figure 2. Mechanistic characterizations. A) T29, T29Kt1, and H460 cells were treated with DMSO (C) or oncrasin-1 (T) (10 µM for T29 and T29Kt1 and 1 µM for H460) for 12 h. Changes of molecules involved in apoptosis and Ras signaling pathways were tested by Western blot analysis. B) Dose-response of oncrasin-1 in H460 cells in the absence or the presence of Raf inhibitor Bay 43-9006 (1 µM), MEK inhibitor U0126 (10 µM), PI3K inhibitor LY294002 (10 µM), and AKT inhibitor X (10 µM). The values shown are the means ± SD of two assays done in quadruplicate. Control cells were treated with solvent (DMSO), whose value was set as 1.
Supplemental Figure 3. Effects of oncrasin-1 on CDK9, CDK7, CDK6, and CDK2. Different doses of oncrasin-1 were incubated with the recombinant CDK9, CDK7, CDK6 or CDK2 kinase reaction systems at 30°C for 15 min. The value was normalized with a DMSO-treated control. The data are the mean ± SD of three assays.