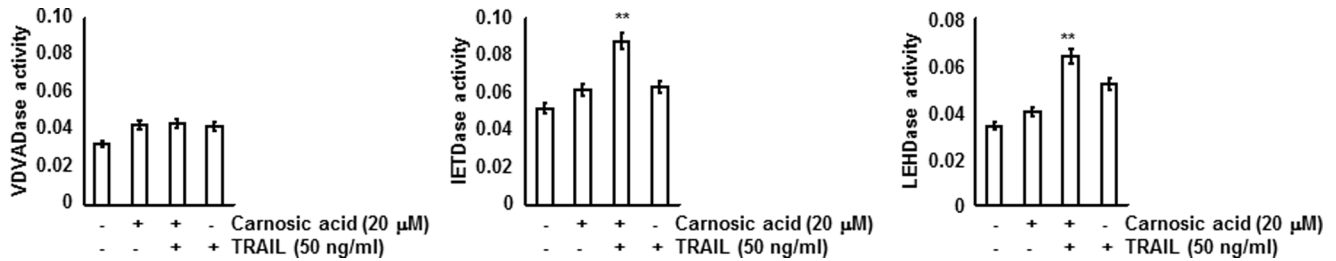
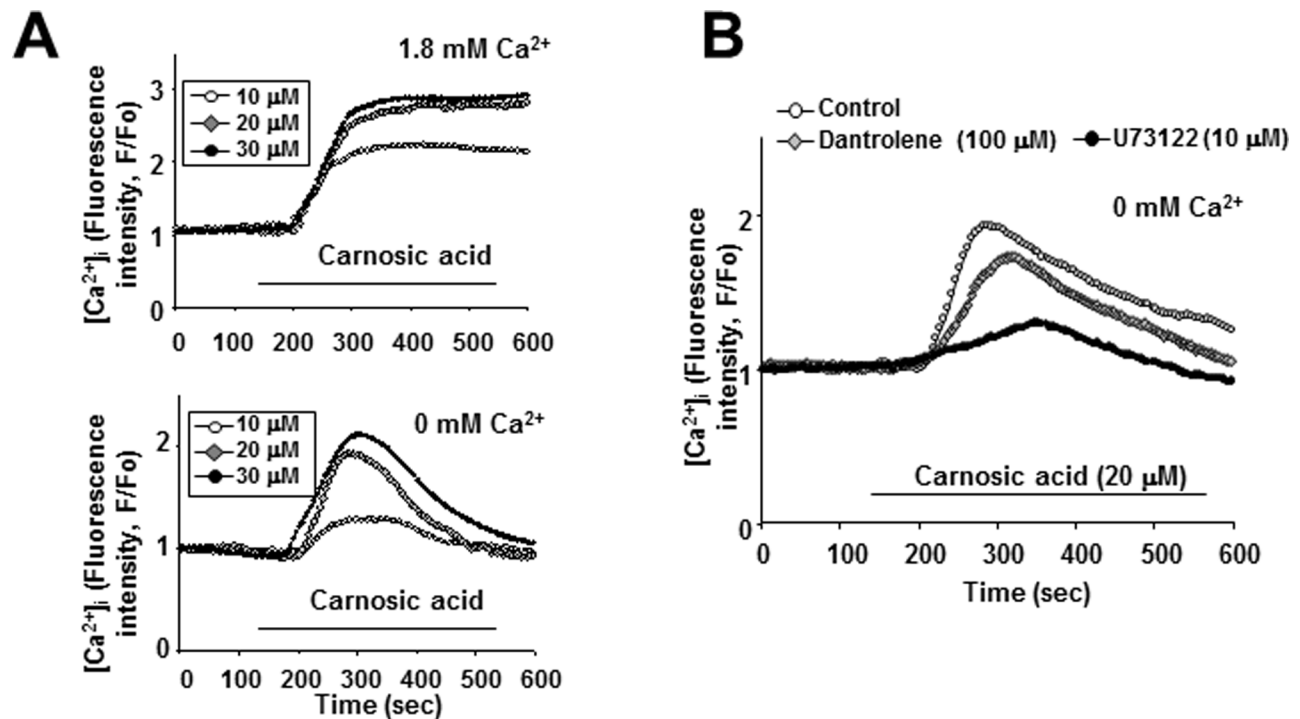


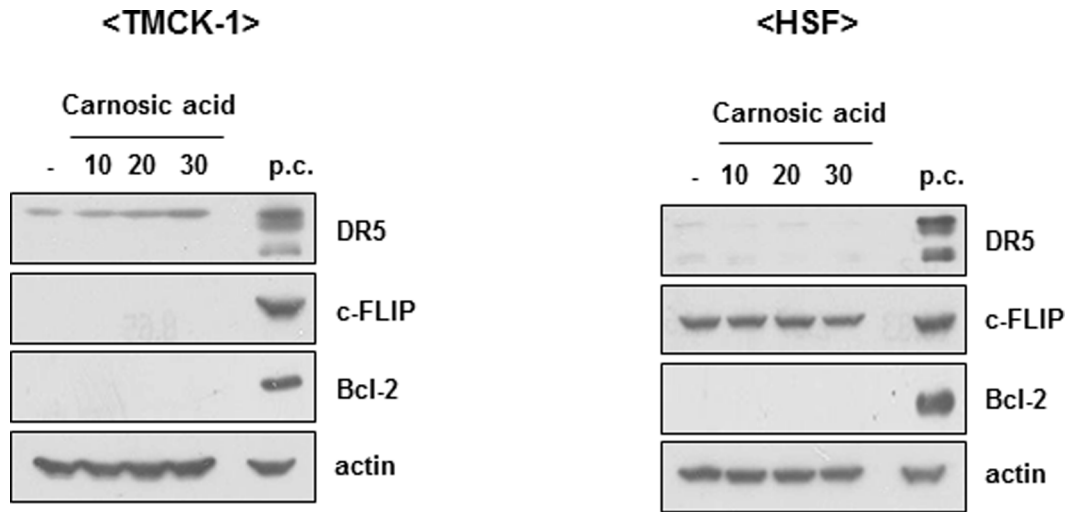
SUPPLEMENTARY FIGURES



Supplementary Figure S1: Carnosic acid sensitizes Caki cells to TRAIL-mediated apoptosis. Caki cells were treated with 50 ng/ml TRAIL in the presence or absence of 20 μM carnosic acid for 24 h. Caspase activities were determined with colorimetric assays using caspase-2 (VDVADase) assay kits, caspase-8 (IETDase) assay kits, caspase-9 (LEHDase) assay kits. The values in figure represent the mean ± SD from three independent samples. ** $p < 0.05$ compared to the carnosic acid treatment alone.



Supplementary Figure S2: Carnosic acid increases intracellular Ca^{2+} concentrations via IP_3 receptors. (A) Caki cells were treated with the indicated concentrations of carnosic acid for the indicated time periods. (B) Caki cells were treated with the ryanodine receptor inhibitor (dantrolene) or phospholipase C inhibitor (U73122), and then treated with 20 μM carnosic acid. Intracellular Ca^{2+} was measured by loading with Fura-2 AM in 1.8 mM Ca^{2+} (A, upper panel) or Ca^{2+} free medium (A, lower panel, and B) and measuring Fura-2 fluorescence ratio signal in a double-wavelength fluorimeter.



Supplementary Figure S3: Effect of carnosic acid on apoptosis-related proteins in normal cells. TMCK-1 and HSF cells were treated with the indicated concentrations of carnosic acid for 24 h. The protein expression levels of DR5, c-FLIP, Bcl-2 and actin were determined by Western blotting. The level of actin was used as a loading control. P.C.; positive control (Caki cell lysates)