Figure S1. The combination of SFN and PBMCs from another volunteer treated with *Lactobacillus* induces apoptosis in human colon cancer HCT116 cells. PBMCs from another volunteer were pre-incubated with 10  $\mu$ g/ml *L. pentosus* S-PT84 for 24 h. HCT116 cells were co-incubated with PBMCs (E/T ratio=100:1) and incubated with SFN for 48 h, and then harvested. After staining with Annexin V and propidium iodide, the cells were subjected to apoptosis analysis using FACSCalibur. The bottom right quadrant indicates early apoptotic cells, whereas the top right quadrant indicates late apoptotic cells. Data are presented as the mean  $\pm$  standard deviation of three experiments. \*\*P<0.01, as indicated. SFN, Sulforaphane; PBMC, peripheral blood mononuclear cells.

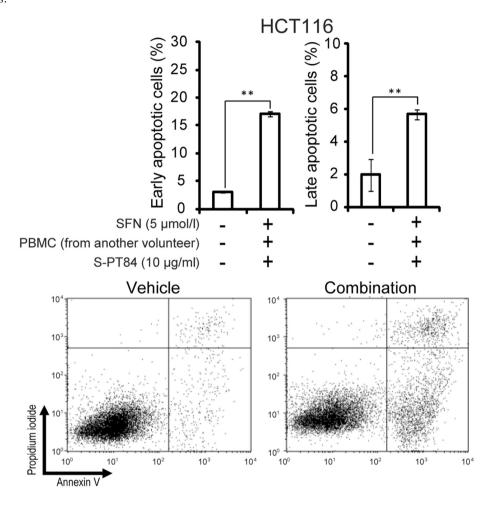


Figure S2. Histograms of the normalized expression of various intracellular regulators of apoptosis on human colon cancer cells. PBMCs ( $2x10^6$ /ml) were pre-incubated with  $10~\mu g/ml~L.~pentosus$  S-PT84 for 24 h. HCT116 or SW480 cells were co-incubated with PBMCs under SFN treatment for 48 h. Cell extracts from (A) HCT116 or (B) SW480 cells were prepared for western blotting as indicated in Fig. 5A and B. The band intensities were quantified by ImageJ software. Fold changes relative to the control were calculated and normalized by GAPDH in each case. (C) Effect of SFN on the acetylation of Histone H4 in PBMCs. The histogram presents the relative expression of acetylated-histone H4 and histone H4 in PBMCs treated with SFN. PBMCs were cultured with or without 5-20  $\mu$ mol/l SFN for 48 h. Cell extracts from PBMCs were prepared for western blotting as indicated in Fig. 5C. The band intensities were quantified by ImageJ software. Fold changes relative to control were calculated and normalized to β-actin in each case. Data are presented as the mean  $\pm$  standard error of three experiments.

