Figure 2. The effects of the fiber feeding on Smad3 protein expression and phosphorylation and Id2 protein expression in the mouse intestine. At week 4 after the feeding, the Balb/c and DBA/2N mice were euthanized and the jejunum were harvested. Mucosal tissue was collected and protein lysates were prepared. Smad3 and Id2 protein levels were detected by western blotting using specific antibodies. β-actin or GAPDH was served as a protein loading control. Phospho-Smad3 (pSmad3) was detected by immunoprecipitation (IP) using an anti-Smad3 antibody followed by western blotting using an anti-pSmad3 antibody. The same amount of protein (250 μg) for each sample was applied to IP. The protein levels were quantified, and expressed as mean ± SEM of Smad3/β-actin (n=16/group), pSmad3 level (n=8/group), Id2/GAPDH (n=8/group) normalized to control. The representative images of western blotting and the quantifications of Smad3, pSmad3 and Id2 are shown. **A**. Balb/c jejunum. **B**. DBA/2N jejunum. *$p<0.05$ compared to the control mice. PC, positive control of the endogenous Smad3 protein prepared from RIE-1 cells; positive control of Id2 protein prepared from the Cos-1 cells transiently transfected with flag-Id2.