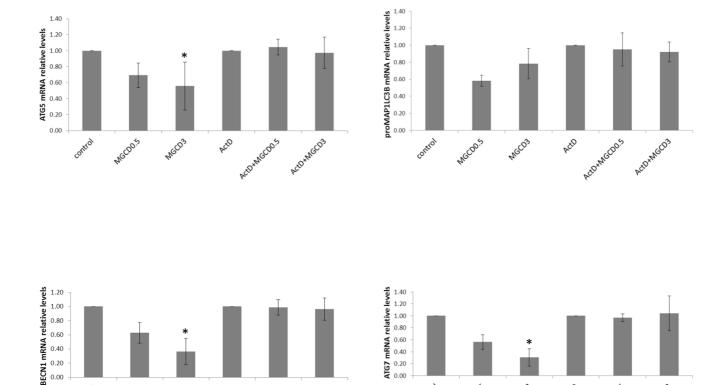
Supplementary Figure 4

0.40

MGCDO.5

MGCD3



ALIDANG COO.5

ACTO

Actor MGC 03

0.20

Mechos

MGCD3

Actor Mecol 5

ACTO

ActOrMGCD3

Supplementary Figure 4. MGCD0103-induced down-regulation of autophagy-related mRNA expression occurs at the transcriptional level and is not due to increased mRNA degradation. In order to examine if modifications of RNA stability could account for the down-regulation of autophagy-related genes observed after 24 hour-treatment with MGCD0103 (3 µmol/L), primary CLL cells were pretreated during 30 minutes with actinomycin D (ActD) at 10 µg/mL to block new RNA synthesis. The cells were then incubated with fresh medium in the presence or in the absence of MGCD0103 (0.5 and 3 µmol/L) for 24 hours. When transcription is inhibited, the effect of MGCD0103 on mRNA stability can then be evaluated. Expression levels of critical autophagy-related genes were analyzed by RT-qPCR. The results show that pre-incubation with ActD completely inhibited MGCD0103-induced downregulation of ATG5, BECN1, MAP1LC3 and ATG7 genes, thus confirming that the decreased mRNA levels resulted from a transcriptional regulation of the genes and not from a global RNA degradation following MGCD0103 treatment. mRNA expression levels were normalized to the 28S ribosomal RNA level of the same sample, and compared to the control (for MGCD0.5 and MGCD3) or to ActD (for ActD+MGCD0.5 and ActD + MGCD3). The mean values \pm SD (n = 5) are shown. *P < 0.05