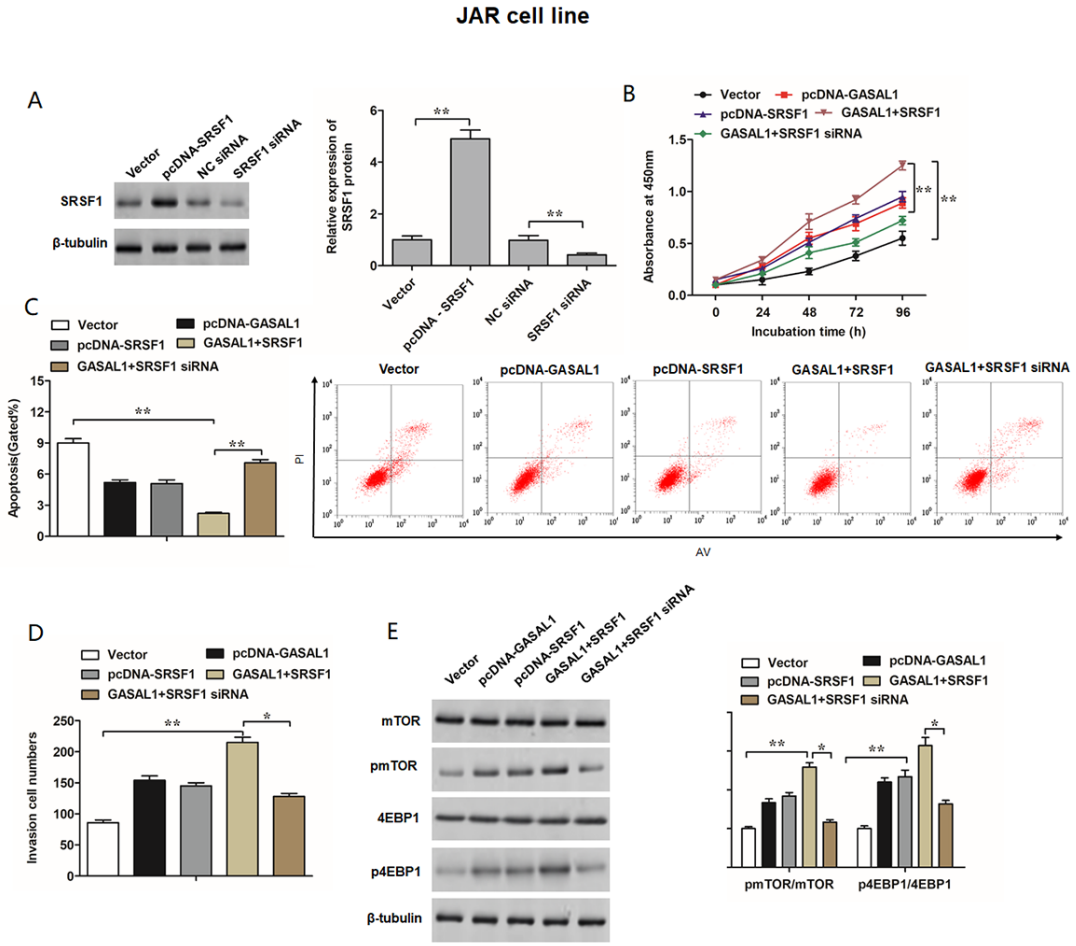
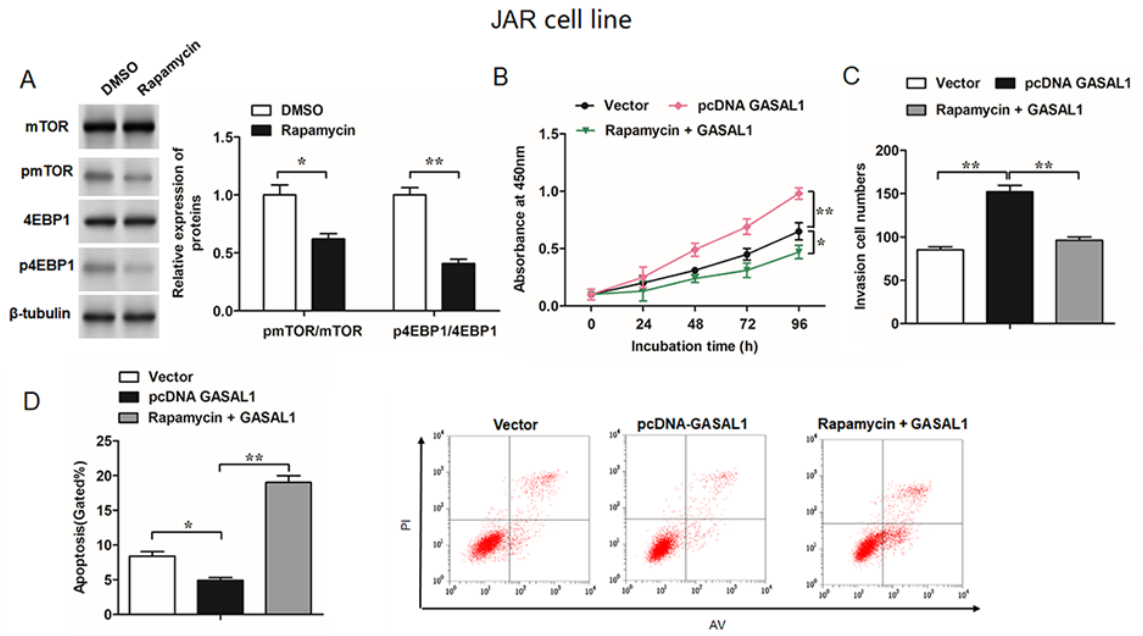


Supplemental Figure 1. GASAL1 enhances proliferation and invasion, suppresses cell apoptosis by the regulation of SRSF1 in JAR cells. A. Efficiencies of SRSF1 siRNA and pcDNA SRSF1 were confirmed by Western blotting. B. Cell proliferation was detected by CCK-8 assay at 0 h, 24 h, 48 h, 72 h and 96 h in JAR cells which were transfected with pcDNA-GASAL1, pcDNA-SRSF1, GASAL1+SRSF1 or GASAL1+SRSF1 siRNA. The concentrations of pcDNA-GASAL1, pcDNA-SRSF1 and SRSF1 siRNA transfected into the JAR cell line were 2 μg/mL, 1.5 μg/mL and 50 nM, respectively. C. Cell apoptosis was detected by Flow cytometry in JAR cell line after transfection for 24 h. D. Cell invasion was detected by Transwell assay. E. Relative expressions of pmTOR and p4EBP1 protein were detected with Western blotting. The

data were presented as the mean ± standard error of mean (SEM), n=3. Student's t test or one-way analysis of variance (ANOVA) was used for comparisons between groups in this study. * $p < 0.05$ and ** $p < 0.01$.



Supplemental Figure 2. GASAL1 regulates JAR cell proliferation, apoptosis and invasion through activating mTOR signaling pathway. A. Expressions of pmTOR and p4EBP1 protein were determined in JAR cells treated by DMSO or mTOR inhibitor (Rapamycin, 10 nM for 72 h). B. Cell proliferation was detected by CCK-8 assay at 0 h, 24 h, 48 h, 72 h and 96 h in JAR cell line. After transfecting with pcDNA-GASAL1, cells were treated by Rapamycin (10 nM for 72 h). C and D. Cell invasion and apoptosis were detected by Flow cytometry and Transwell assay in treated cells. The data were presented as the mean ± standard error of mean (SEM), n=3. Student's t test or one-way analysis of variance (ANOVA) was used for comparisons between groups in this study. * $p < 0.05$ and ** $p < 0.01$.