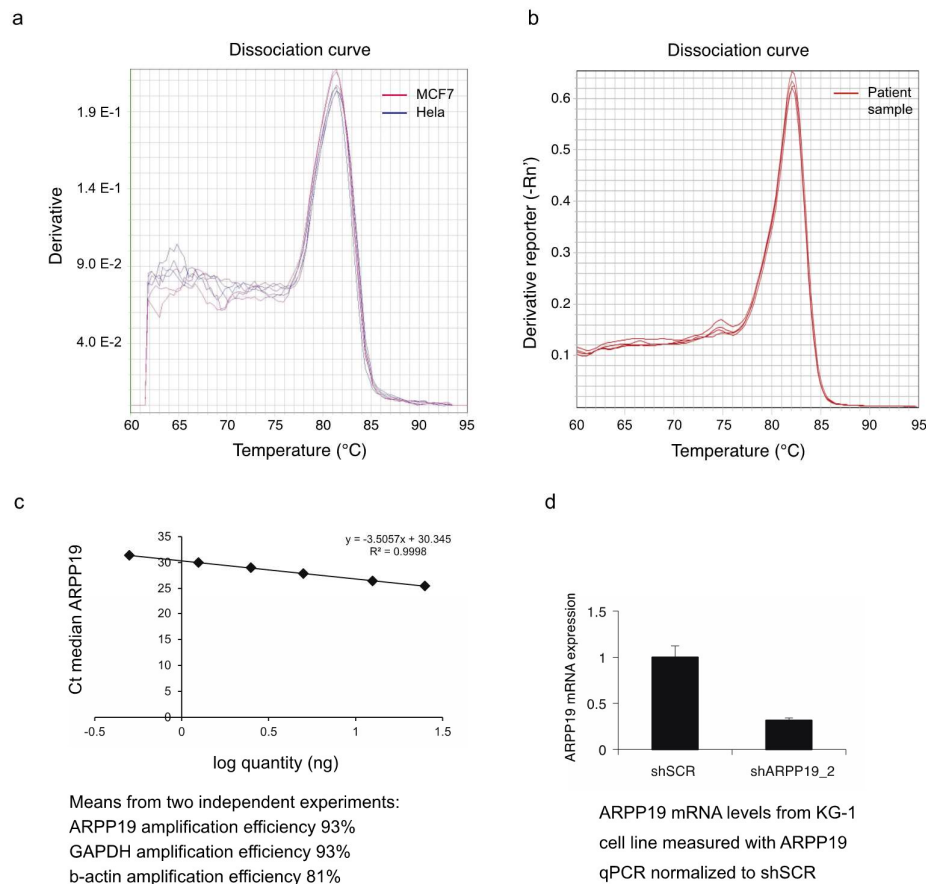


# Supplementary Materials: Arpp19 Promotes Myc and Cip2a Expression and Associates with Patient Relapse in Acute Myeloid Leukemia

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**Figure S1** Validation of ARPP19 specific RQ-PCR. **a)** and **b)** Melting curves from RQ-PCR of ARPP19 gene with primers indicated in Supplemental table 7. Amplicons from both MCF7 and Hela cell line samples, as well as diagnosis phase AML patient sample, reveal a single peak following melting curve analysis. **c)** Amplification efficiency of ARPP19 RQ-PCR used in this study was 93% when measured with standard curve analysis. Shown is representative standard curve, but similar results were extracted from two independent experiments. Control genes used in the study, GAPDH and b-actin, showed amplification efficiencies of 93% and 81%, respectively. **d)** RQ-PCR specificity validation of ARPP19 assay on ARPP19 shRNA transduced KG1 cells.

Figure 2a left

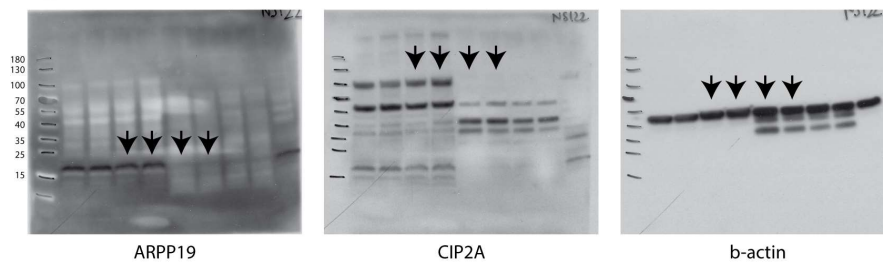
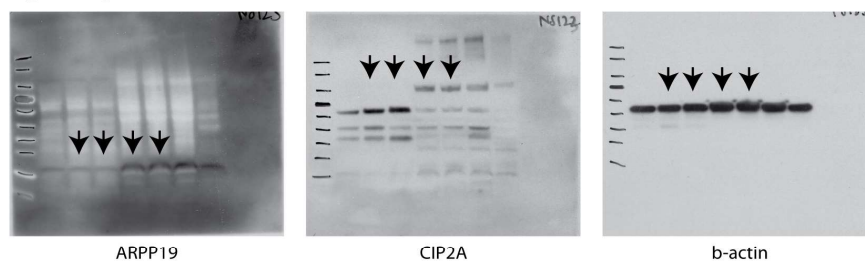


Figure 2a right



Thermo Scientific™ PageRuler™ Prestained Protein Ladder 26616, 10 to 180 kDa, used in all WBs

Figure 2c



Figure 2f

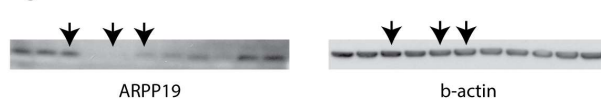


Figure 3a left

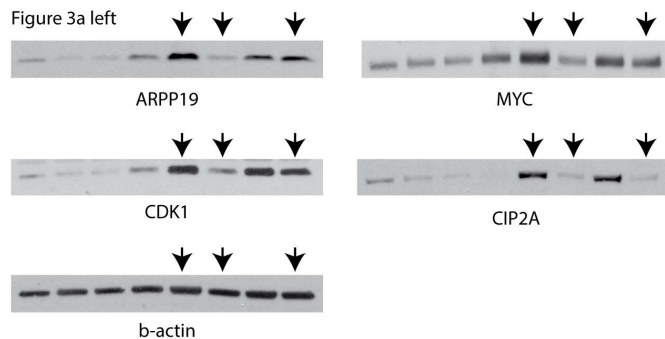
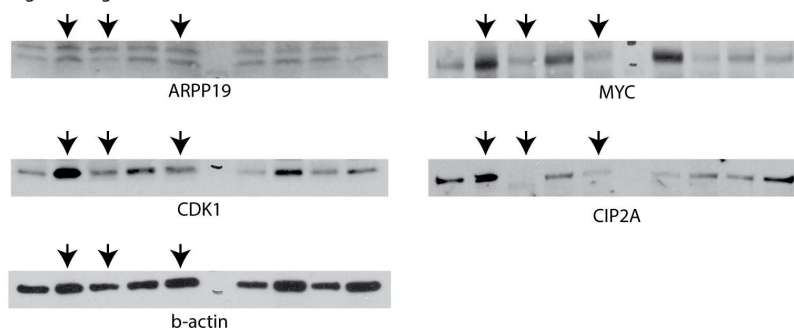
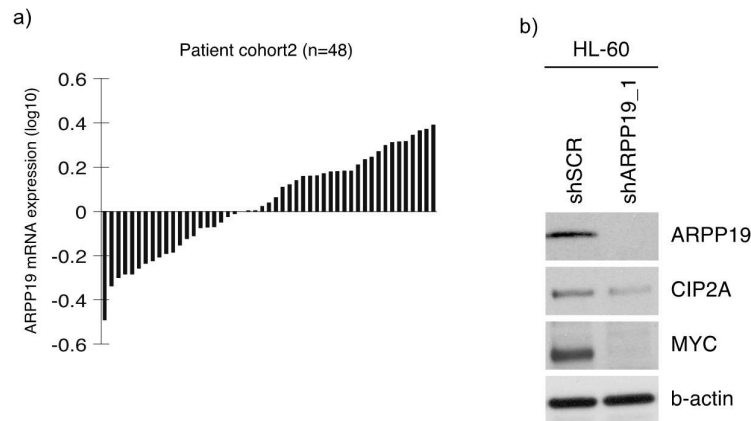


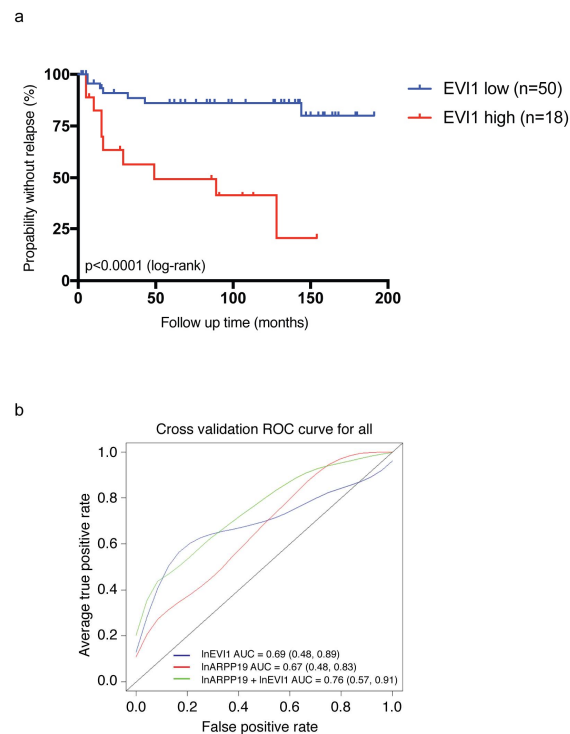
Figure 3a right



**Figure S2.** Original western blots for all main figures included in the article.



**Figure S3** Validation of ARPP19 overexpression in AML cohort2. **a)** Waterfall blot of ARPP19 mRNA expression in patient cohort2 ( $n = 48$ ) normalized to GAPDH & b-actin expression and a pooled normal bone marrow sample ( $n = 56$ ). ARPP19 was 58% ( $n = 28$ ) overexpressed in the sample panel. **b)** Representative western blot analysis of ARPP19, CIP2A and MYC expression in HL-60 cell line stably transduced with scrambled (shSCR) or ARPP19 shRNAs (shARPP19\_1).



**Figure S4.** Kaplan-Meier curve for time to relapse according to EVI1 mRNA expression in cohort1. **a)** High EVI1 expression is significantly associated with shorter relapse free time of AML patients,  $p < 0.0001$  by log-rank test. **b)** The ROC curve analysis on the abilities of ARPP19 and EVI1 gene expression at diagnosis in prediction of relapse in AML patients. AUC values and 95% confidence intervals are shown for each analysis.

