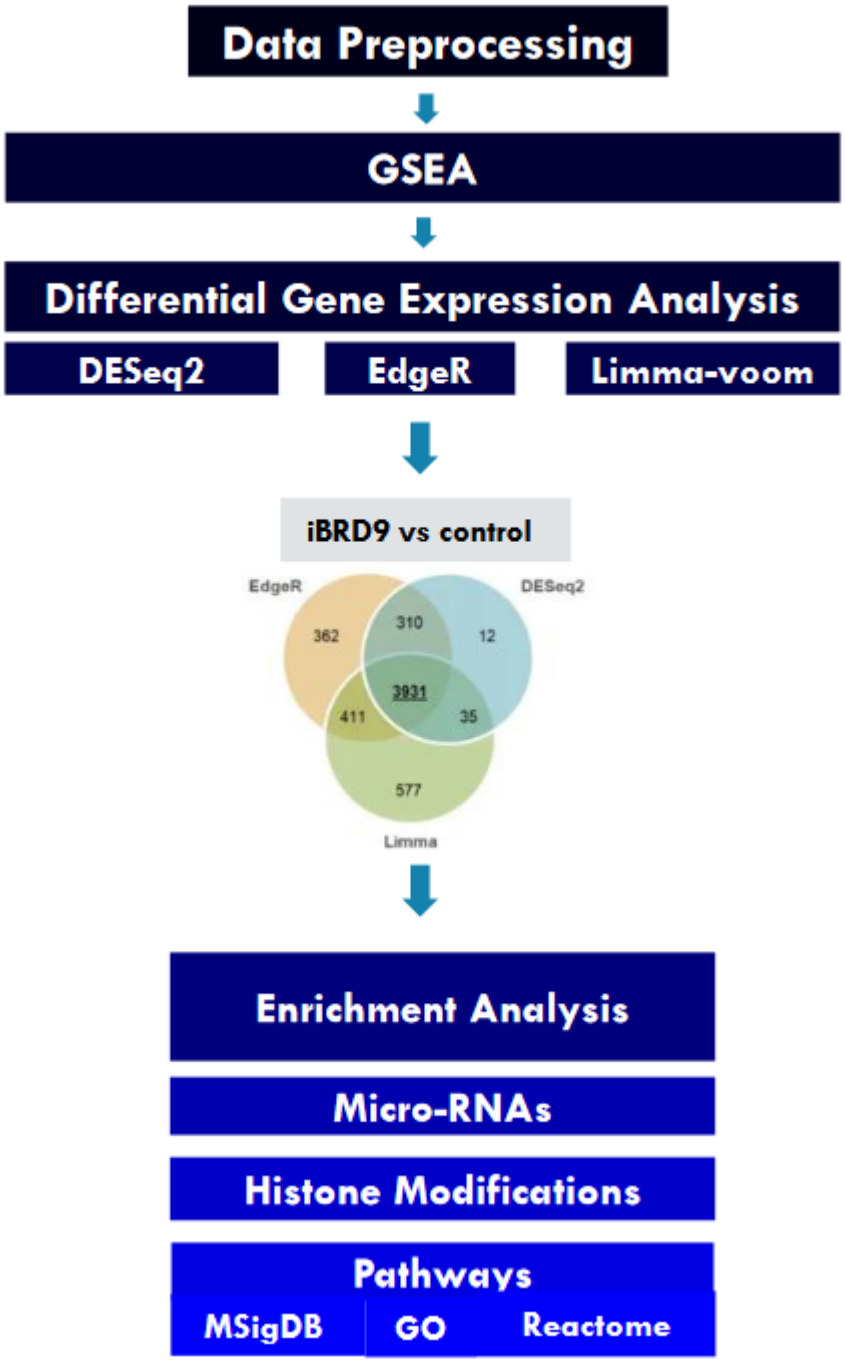

Figure S1. Flowchart of experimental design and bioinformatics analyses.

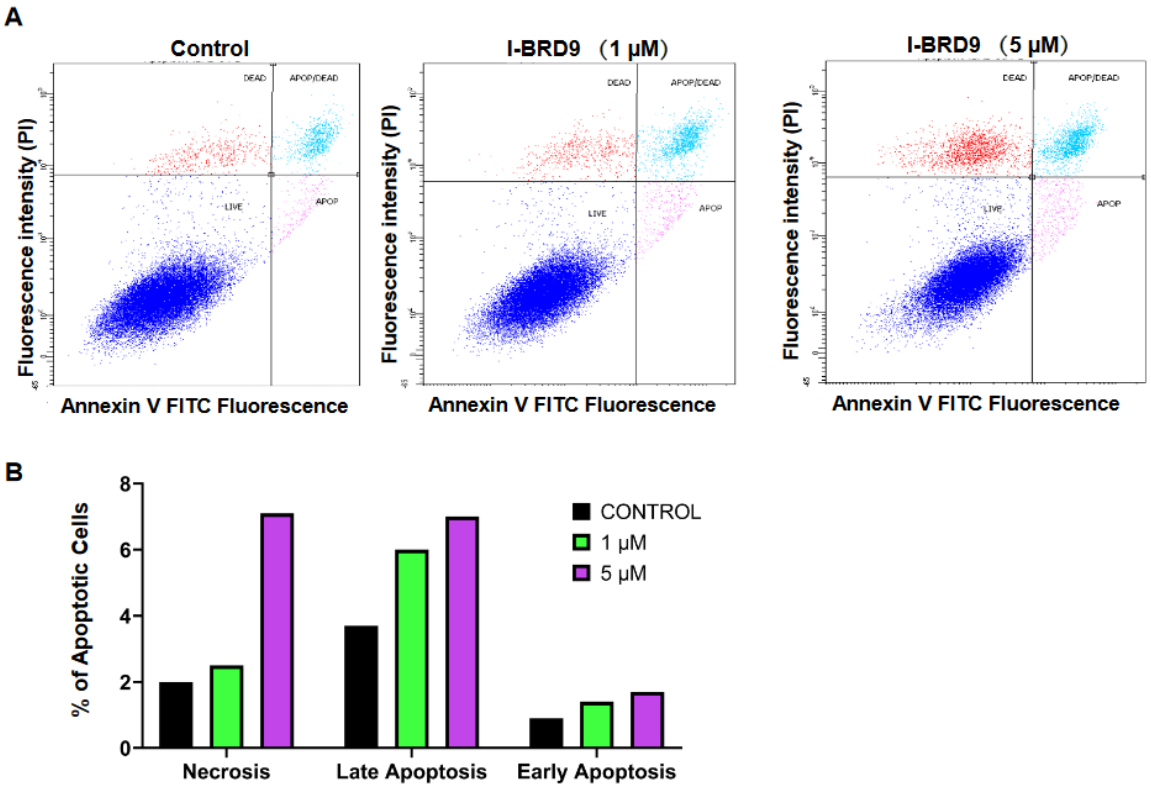

Figure S2. Flow cytometric analysis of UF cell apoptosis and necrosis after 24 h treatment with I-BRD9. HuLM cells were treated with 1 and 5 μM I-BRD9 or vehicle (DMSO) for 24 h and subjected to fluorescein-labeled Annexin V assay. (**A**) Images of flow cytometric analysis in the HuLM cells treated with vehicle, 1 μM I-BRD9 and 5 μM I-BRD9; (**B**) Percentages of necrosis, late and early apoptosis in HuLM cells treated with 1 μM and 5 μM of I-BRD9 treatment.

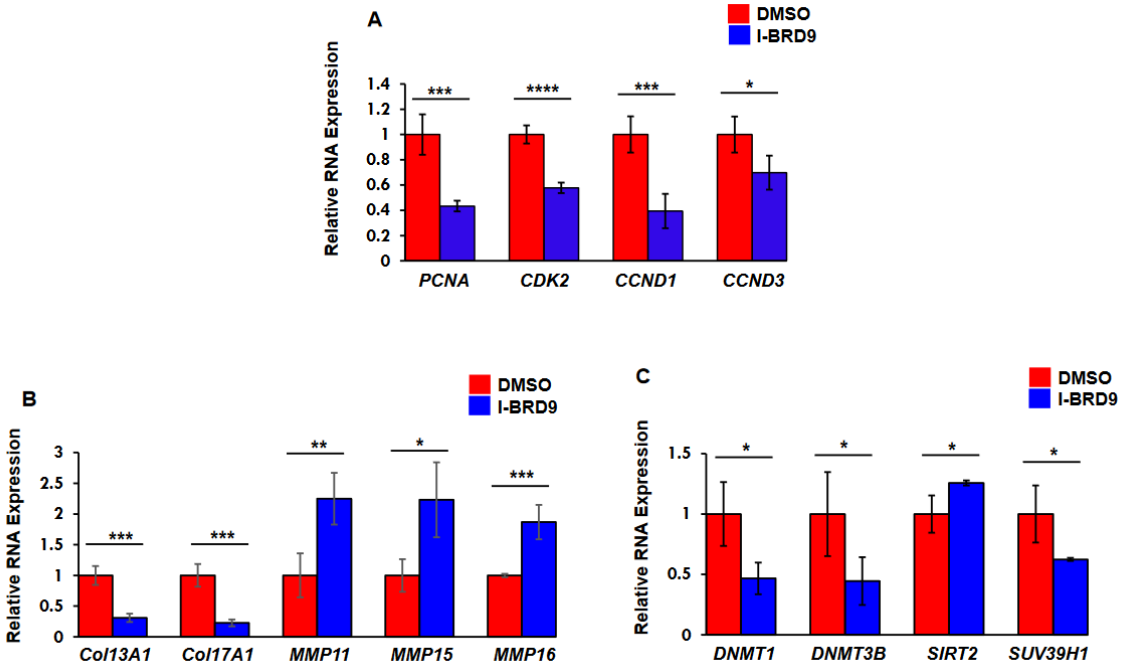

Figure S3. Quantitative Real-time PCR was performed to determine the relative RNA levels of genes. (A) *CDK2*, *CCND1*, *CCND3*, *PCNA;* **(B)** *Col13A1,Col17A1, MMP11*, *MMP15*, *MMP16;* **(C)** *DNMT1 DMMT3B*, *SIRT2*, *SUV39H1*

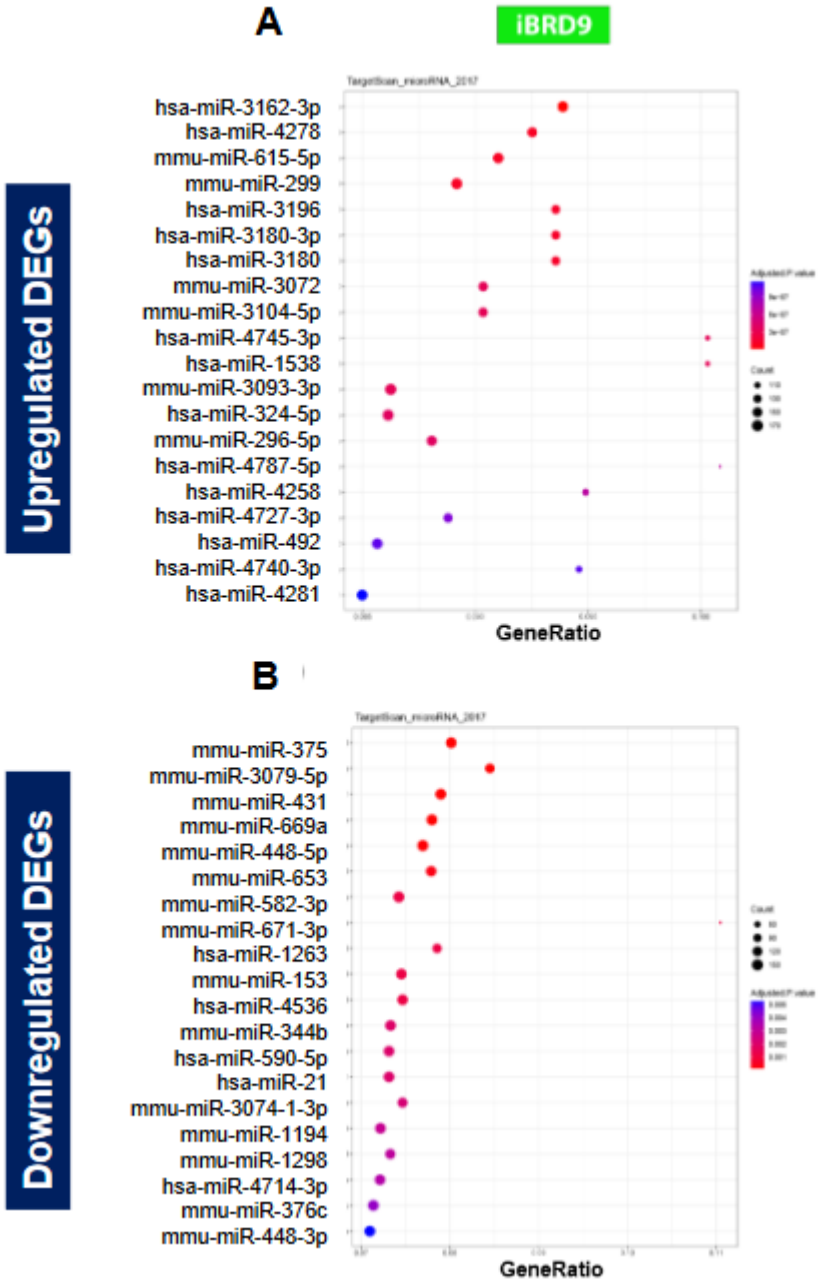

Figure S4. MicroRNAs enrichment analysis. The dot plots showed the top twenty enrichment Terms for microRNAs associated with up DEGs, (**A**) MicroRNAs associated with up DEGs in response to I-BRD9 treatment; (**B**) MicroRNAs associated with down DEGs in response to I-BRD9 treatment.