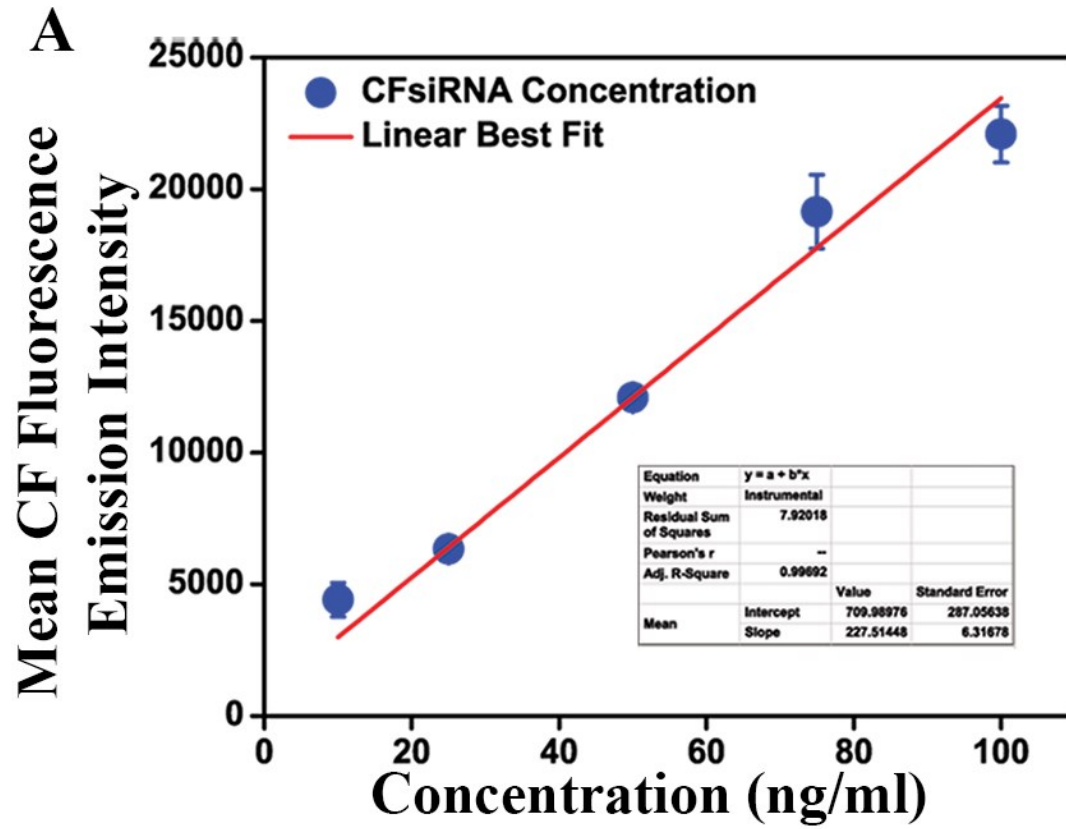


# **A non-viral siRNA nano-delivery system targeting epigenetic methyltransferase EZH2 for precise Acute Myeloid Leukemia therapy**

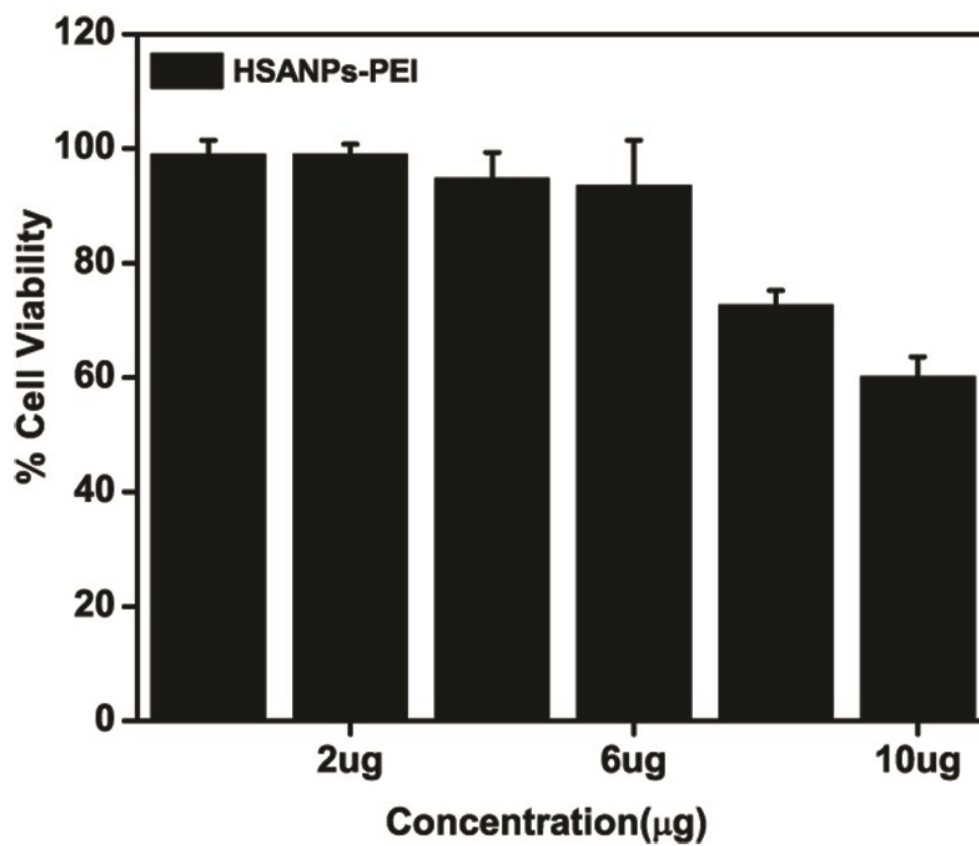
Babita Kaundal, Avinash Chandra Kushwaha, Anup Kumar Srivastava, Surajit Karmakar, and  
Subhasree Roy Choudhury<sup>\*a</sup>

Institute of Nano Science and Technology, Habitat Centre, Phase-10, Mohali, Punjab - 160062,  
India.

Supplemental Data

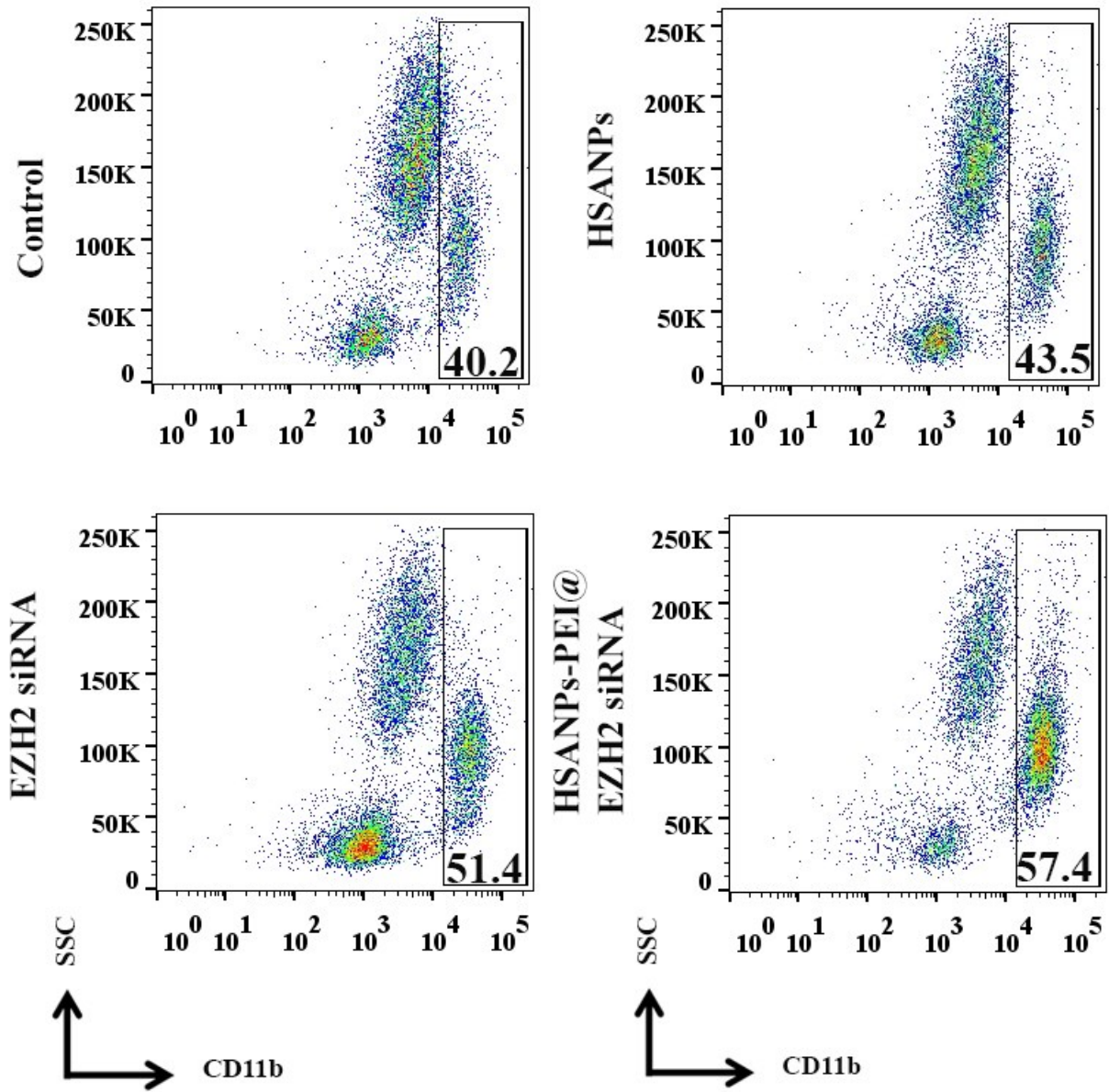


**Supplemental Fig.S1:** (A) CF siRNA standard curve based on the fluorescence emission intensity (AU) of fluorescein.

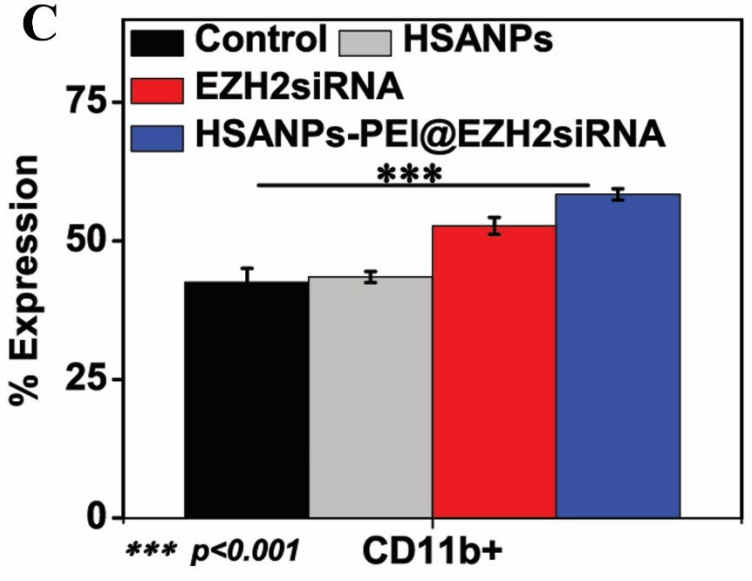
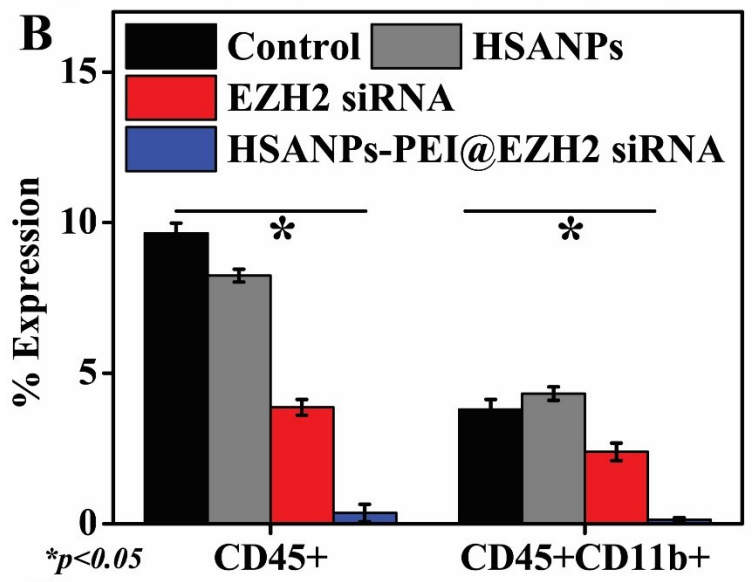
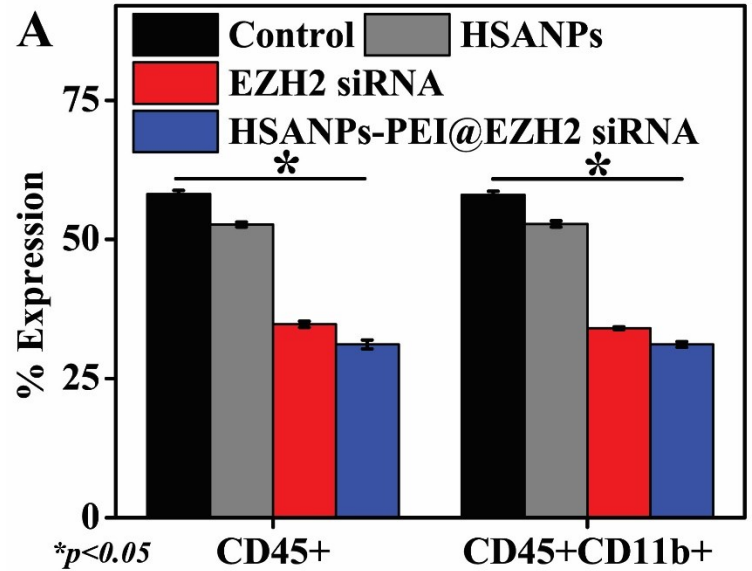


**Supplemental Fig. S2.** Cellular cytotoxicity of HSANPs-PEI nanocarrier obtained using MTT assay.

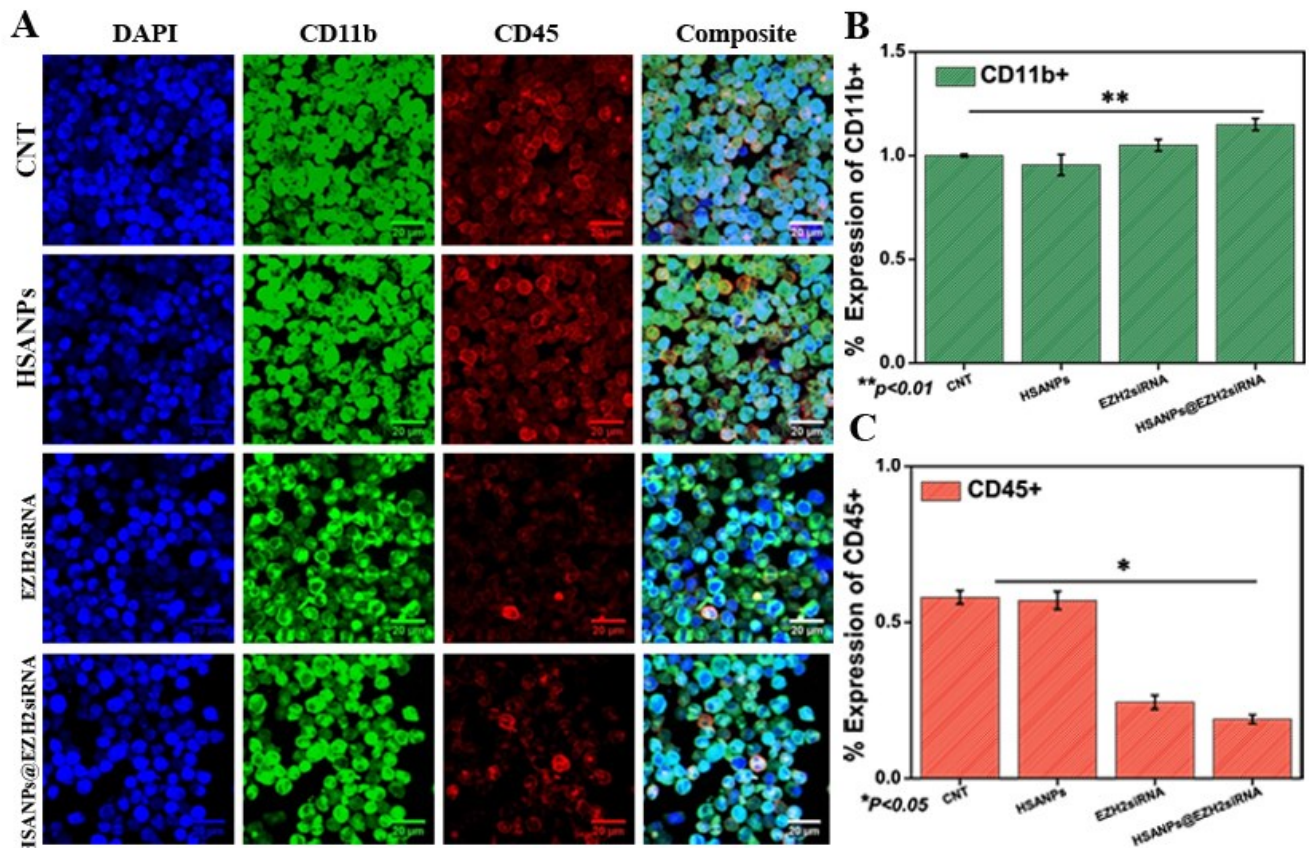
# Peripheral Blood



**Supplemental Fig.S3:** The flow cytometry-based quantitation of CD11b<sup>+</sup> positive cells in peripheral blood obtained from mice injected with PBS (control), HSANPs, EZH2SiRNA, and HSANPs-PEI@EZH2siRNA.



**Supplemental Fig.S4:** Histogram shows the expression of CD45<sup>+</sup> and CD45<sup>+</sup>/CD11b<sup>+</sup> in stained population from, (A) peripheral blood-derived monocytes and (B) bone marrow. (C) Flow cytometry-based quantification of CD11b<sup>+</sup> population in peripheral blood fraction. The results analyzed for statistical comparison via one-way ANOVA \*P < 0.05, \*\*\*P < 0.001 (n = 3) significance levels with the Tukeytest.



**Supplemental Fig 5:**(A) The confocal images of CD11b<sup>+</sup>/CD45<sup>+</sup>stained cells after treatment ofHSANPs, EZH2siRNA, and HSANPs@EZH2siRNAfrom mice injected. The bar diagram shows the quantitation of (B) CD11b<sup>+</sup> and (C) CD45<sup>+</sup>. The results analyzed for statistical comparison via one-way ANOVA \*\*P < 0.01,\*P < 0.05 (n = 3) significance levels with the Tukey test.