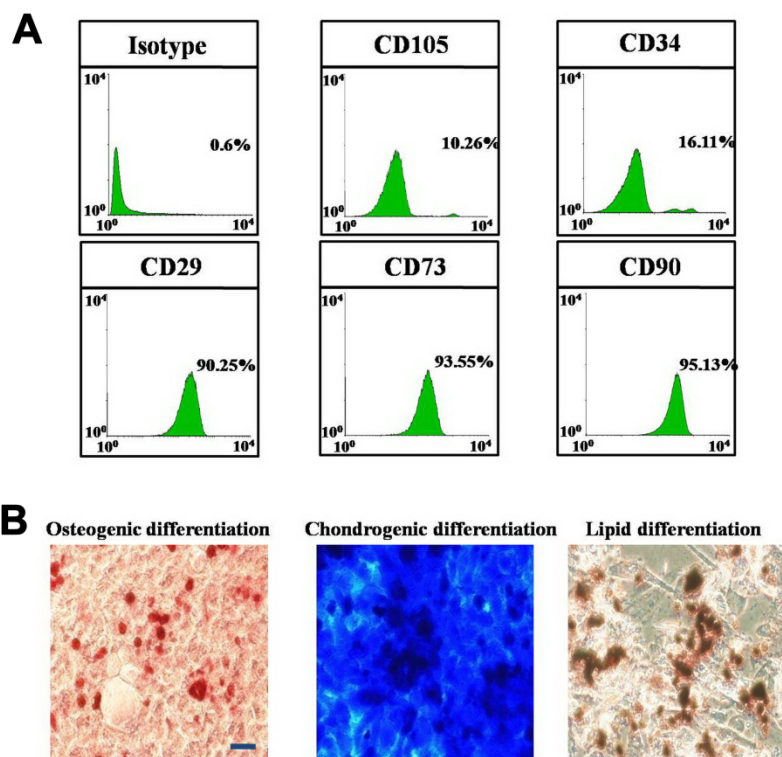
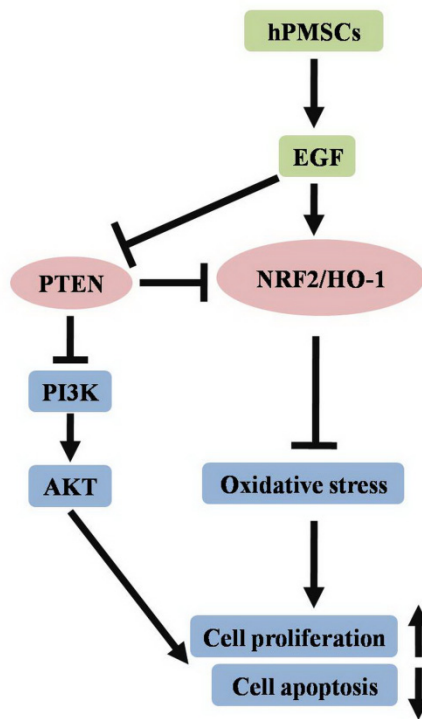


## SUPPLEMENTARY FIGURES

### Supplementary Figures



**Supplementary Figure 1. Characterization of hPMSCs was tested.** (A) The expression levels of CD105, CD29, CD34, CD73, and CD90 in hPMSCs were detected by flow cytometry. (B) hPMSCs can differentiate into adipocytes (oil red), osteoblasts (alizarin red) and chondroblasts (alcian blue) under standard in vitro differentiation conditions. Scale bars = 10  $\mu$ m.



**Supplementary Figure 2. Proposed model for the interaction between NRF2/HO-1 and POI disease.** EGF derived from hPMSCs promoted the mRNA and protein expression of NRF2/HO-1 and inhibited the mRNA and protein expression of PTEN in POI.