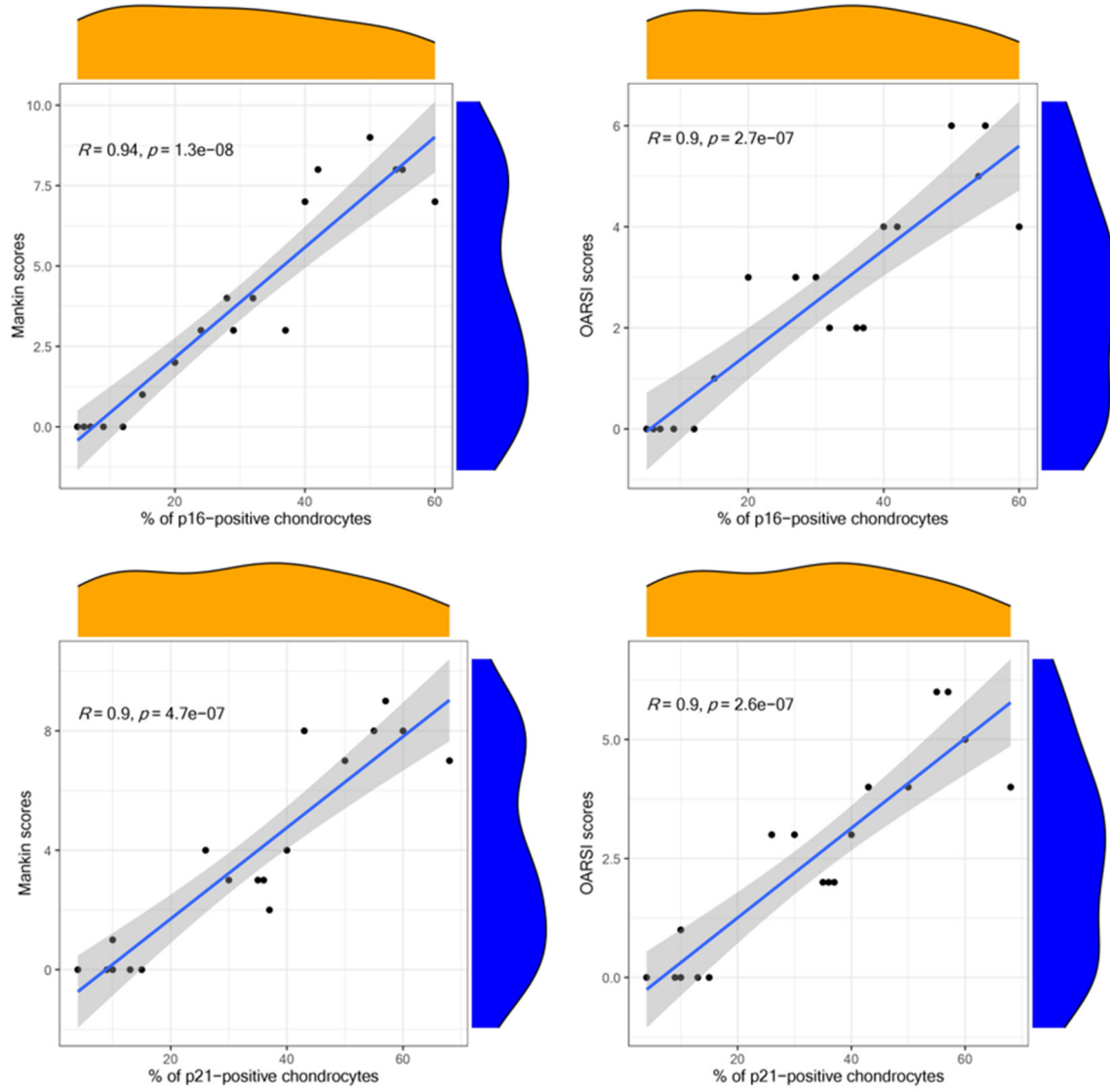
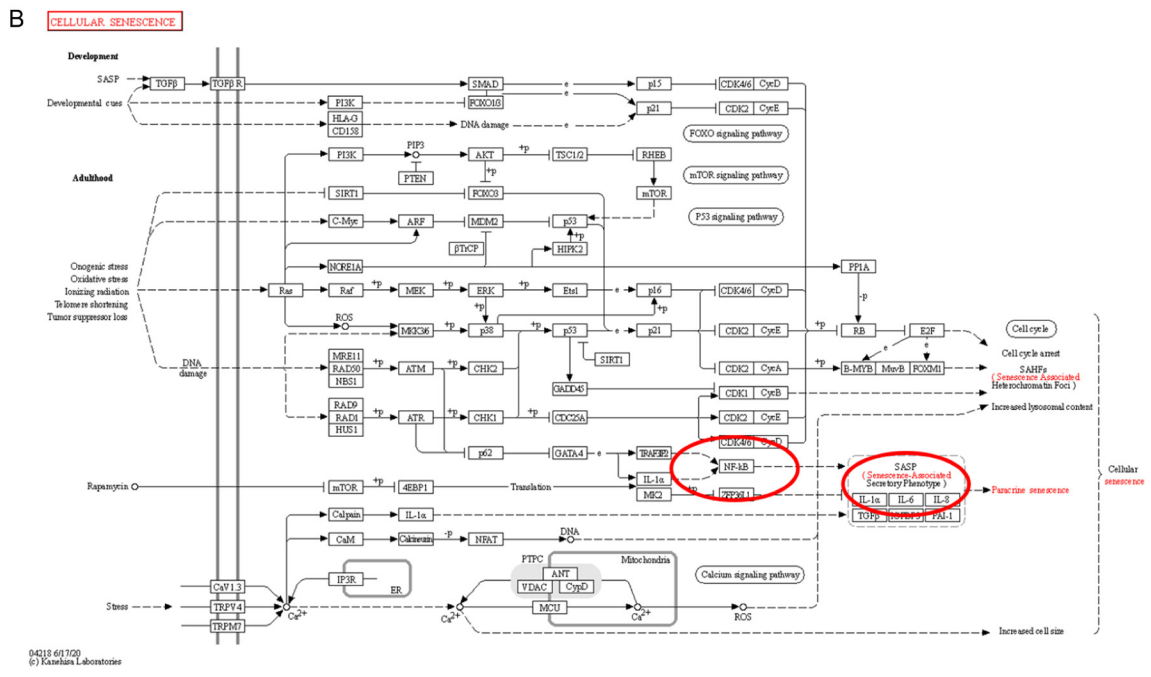
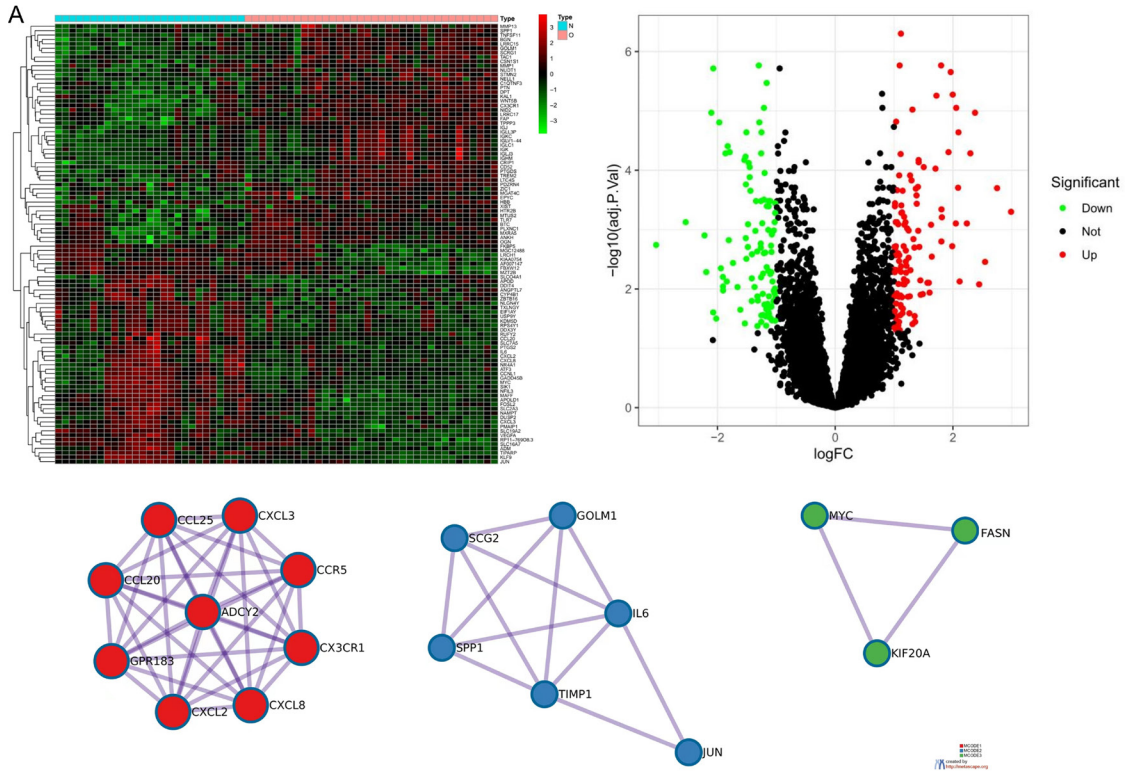


# Pterostilbene ameliorates osteoarthritis through PI3K/AKT/NF- $\kappa$ B axis



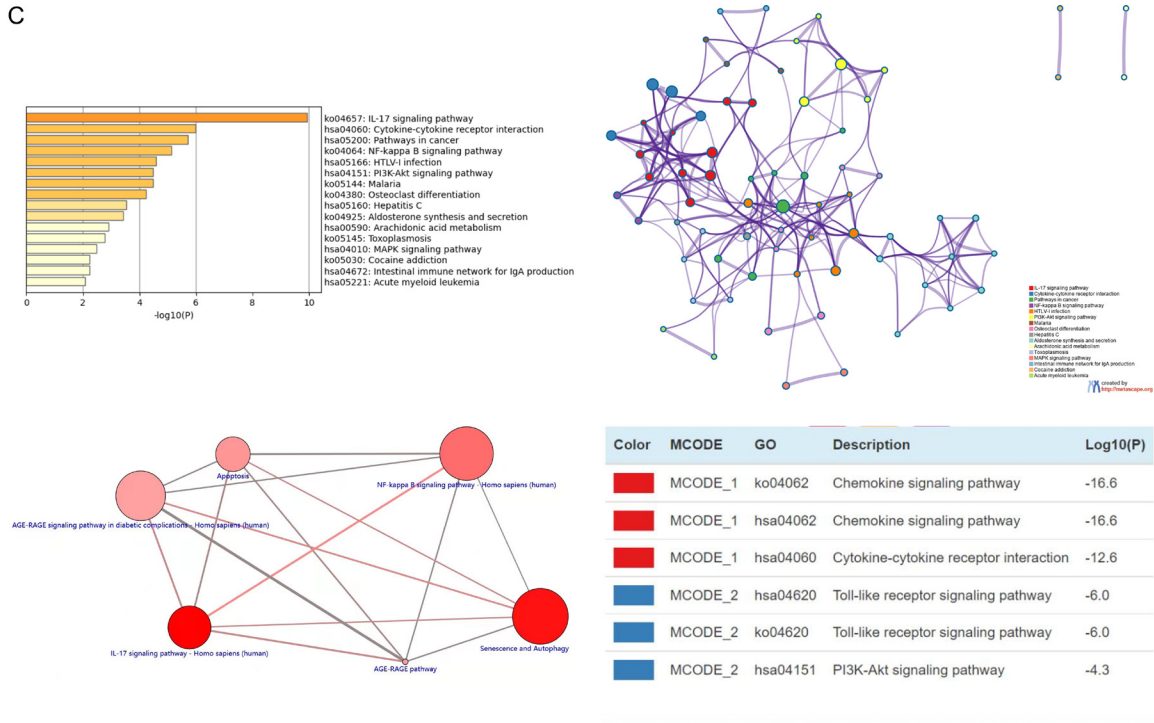
**Figure S1.** Correlation analysis of the ratio of positive cells for aging markers p16 and p21 with Mankin scores and OARSI scores showed that there was a significant positive correlation between them.

# Pterostilbene ameliorates osteoarthritis through PI3K/AKT/NF- $\kappa$ B axis

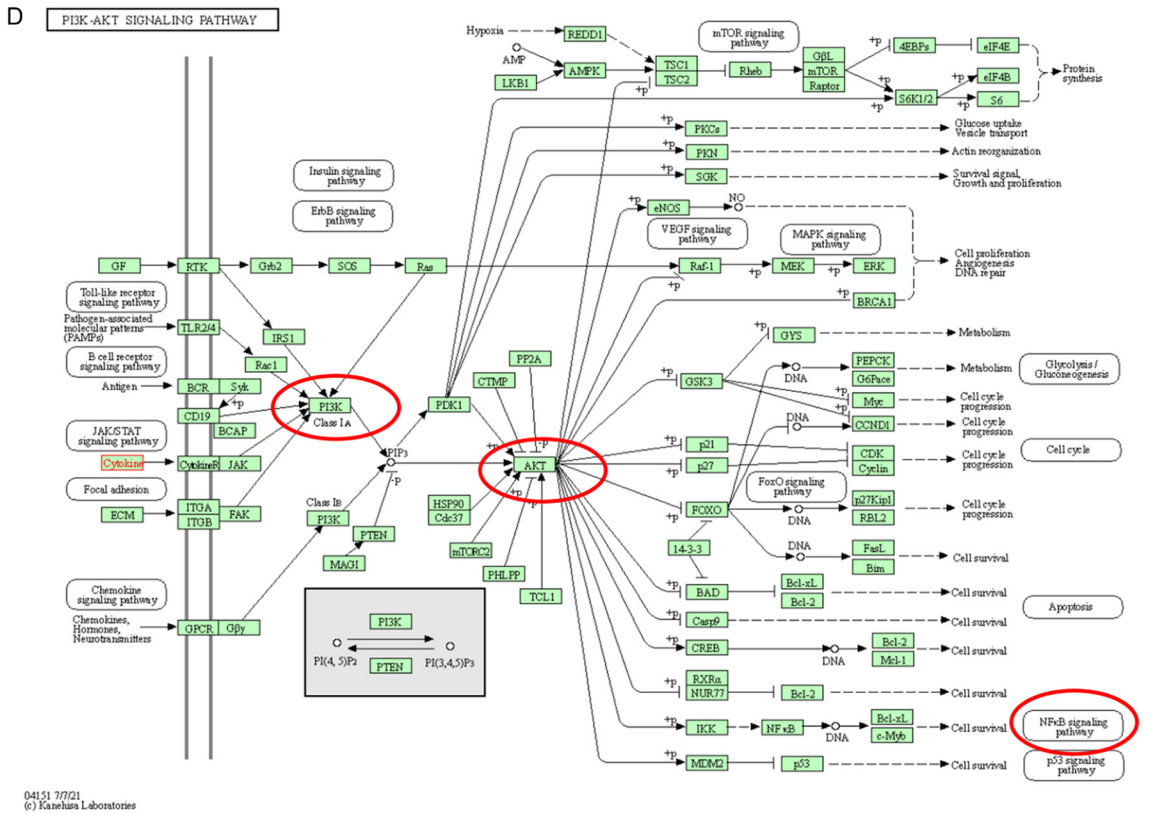


# Pterostilbene ameliorates osteoarthritis through PI3K/AKT/NF-κB axis

C



D



**Figure S2.** Bioinformatics analysis results showed the potential mechanism of PTE in the treatment of OA: regulating the PI3K/AKT/NF-κB signaling pathway axis inhibits the expression of SASP and plays an anti-inflammatory and anti-aging role in the treatment of OA.