

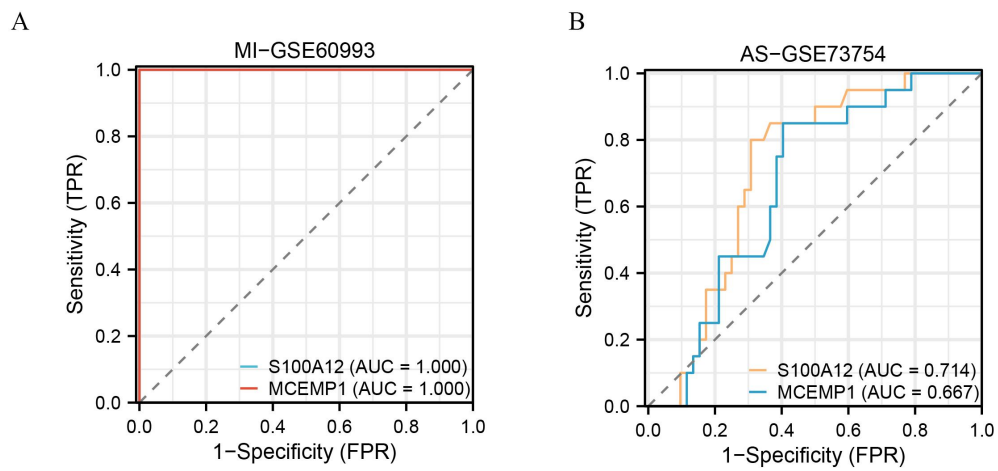
## **Supplementary Material**

**Determining the biomarkers and pathogenesis of Myocardial Infarction  
combined with Ankylosing Spondylitis via a systems biology approach**

**Table S1** Basic information of collected microarray datasets from GEO database

| Dataset  | Platform | Samples             | Country     |
|----------|----------|---------------------|-------------|
| GSE66360 | GPL570   | 49 MI and 50 Normal | USA         |
| GSE25101 | GPL6947  | 16 AS and 16 Normal | Australia   |
| GSE60993 | GPL6884  | 7 MI and 7 Normal   | South Korea |
| GSE73754 | GPL10558 | 52 AS and 20 Normal | Canada      |

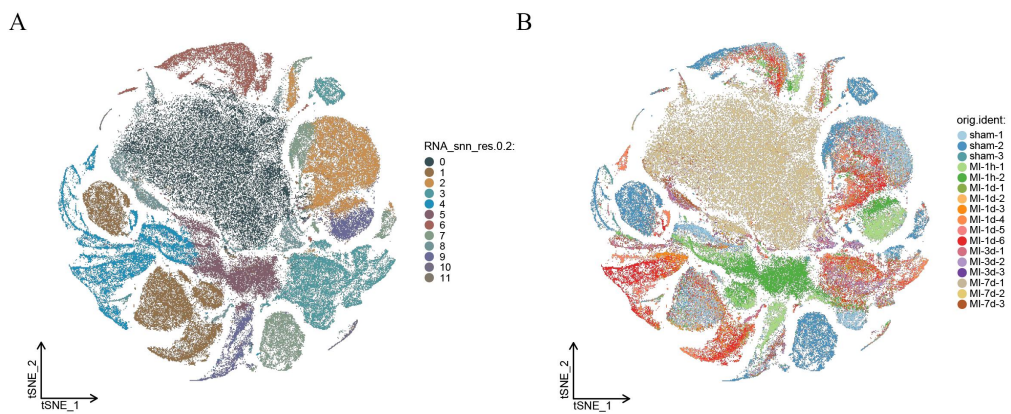
## Screening of C-DEGs



**Fig. S1** Screening of C-DEGs. (A) ROC curves of hub genes in the GSE60993 cohort.

(B) ROC curves of hub genes in the GSE73754 cohort.

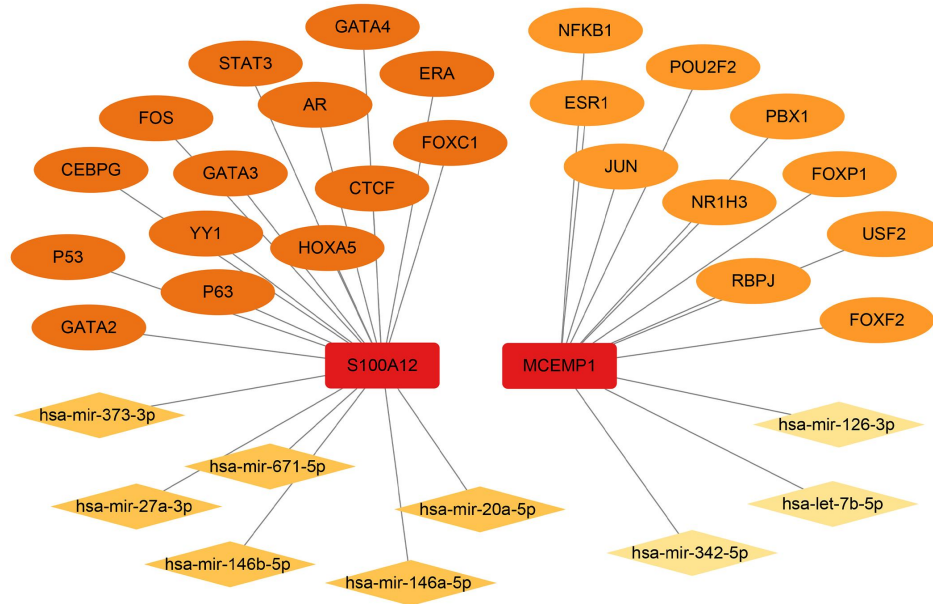
## Single-cell analysis



**Fig. S2** Single-cell analysis. (A,B) T-distributed Stochastic Neighbor Embedding (tSNE) of 12 cell clusters (resolution ratio = 0.2) (A) or sample origin (B).

## Construction of TFs - miRNAs regulatory network

A



**Fig. S3** Construction of TFs - miRNAs regulatory network. (A) TFs and miRNAs regulatory networks for S100A12 and MCEMP1.