Supplementary Data 1: Enrichment analysis of whole clusters-specific markers based on current pathway databases (KEGG and GO).

Supplementary Data 2: GO enrichment analysis of top 100 genes in GEP1-4.

Supplementary Data 3: Marker genes of CAF subclusters from human lung adenocarcinoma (GSE123904).

Supplementary Data 4: Enrichment analysis of whole clusters-specific markers of human lung CAF (GSE123904) based on current pathway databases (GO).

Supplementary Data 5: Patient information of 90 lung adenocarcinoma cases.