

Title: Supplementary Data 1

Description: List of differentially expressed genes from bulk-RNAseq analysis. Genes identified as differentially expressed between *A. fumigatus*-induced Postn^{Lin} fibroblasts and resident Pdgfra-GFP fibroblasts from saline mock-inoculated mice based on bulk RNA-seq analysis. For each gene, the table reports the gene identifier, log₂ fold change and Bonferroni-adjusted *p*-value.

Title: Supplementary Data 2

Description: List of differentially upregulated genes from bulk-RNAseq analysis. Differential gene expression was assessed using DESeq2 with two-sided Wald tests, and P-values were adjusted for multiple comparisons using the FDR method.

Title: Supplementary Data 3

Description: List of differentially downregulated genes from bulk-RNAseq analysis. Differential gene expression was assessed using DESeq2 with two-sided Wald tests, and P-values were adjusted for multiple comparisons using the FDR method.

Title: Supplementary Data 4

Description: Functional classification of DEGs in *A. fumigatus* induced clusters Activated^{Alv} and Activated^{Pbr}. Differentially expressed genes identified in the Activated^{Alv} and Activated^{Pbr} clusters following *A. fumigatus* exposure were functionally classified. The table presents genes grouped according to their annotated functional role.

Title: Supplementary Data 5

Description: List of differentially expressed genes from scRNA-seq analysis. Differential expression was computed using a two-sided Wilcoxon rank-sum test, and P-values were adjusted for multiple comparisons using the FDR method.