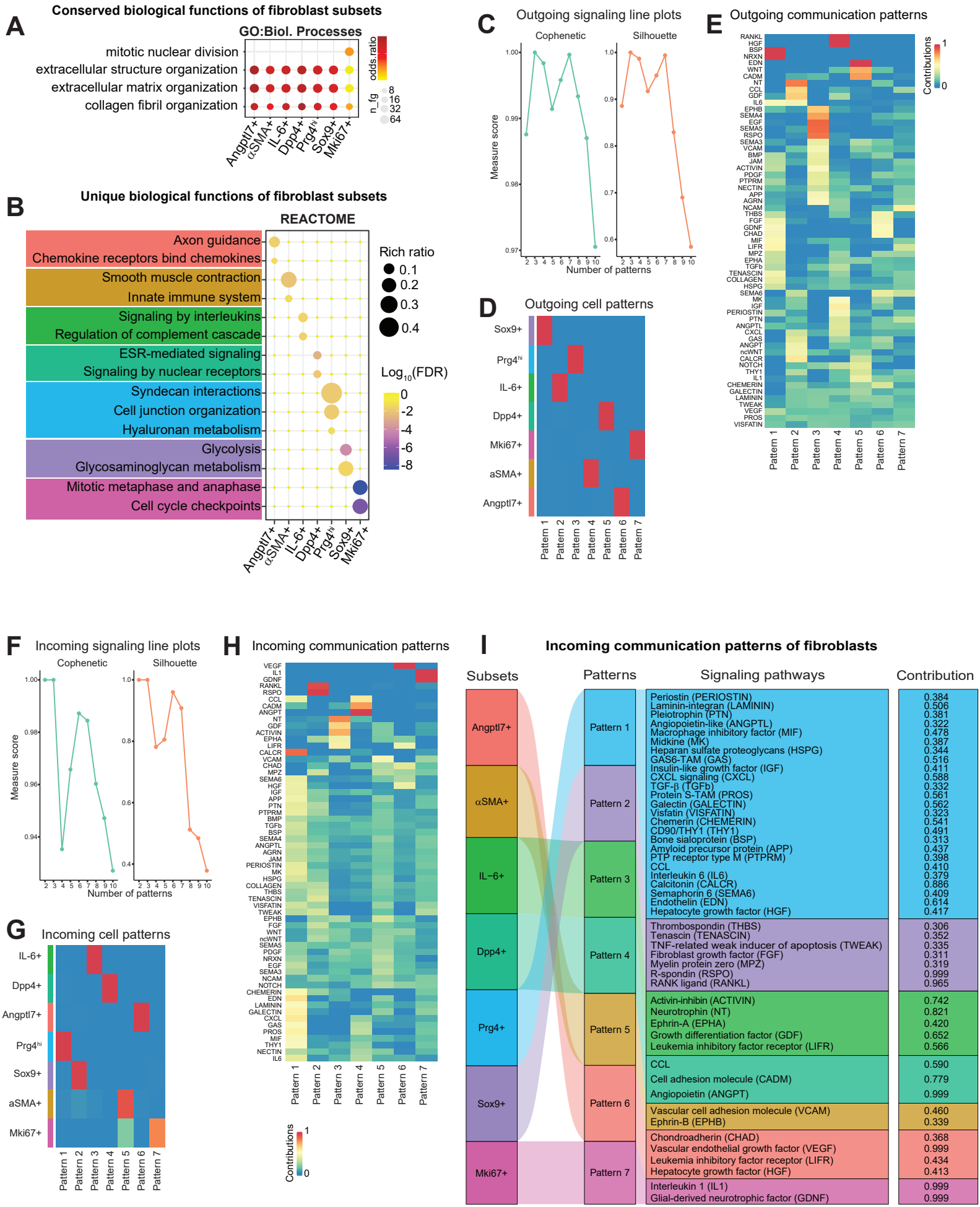
A
Conserved biological functions of fibroblast subsets
GO:Biol. Processes
mitotic nuclear division
extracellular structure organization
extracellular matrix organization
collagen fibril organization
odds.ratio
n_fg
8
16
32
64
Angptl7+
αSMA+
IL-6+
Dpp4+
Prg4hi
Sox9+
Mki67+
B
Unique biological functions of fibroblast subsets
REACTOME
Axon guidance
Chemokine receptors bind chemokines
Smooth muscle contraction
Innate immune system
Signaling by interleukins
Regulation of complement cascade
ESR-mediated signaling
Signaling by nuclear receptors
Syndecan interactions
Cell junction organization
Hyaluronan metabolism
Glycolysis
Glycosaminoglycan metabolism
Mitotic metaphase and anaphase
Cell cycle checkpoints
Rich ratio
0.1
0.2
0.3
0.4
Log10(FDR)
0
-2
-4
-6
-8
C
Outgoing signaling line plots
Cophenetic
Silhouette
Measure score
Number of patterns
D
Outgoing cell patterns
Sox9+
Prg4hi
IL-6+
Dpp4+
Mki67+
aSMA+
Angptl7+
Pattern 1
Pattern 2
Pattern 3
Pattern 4
Pattern 5
Pattern 6
Pattern 7
E
Outgoing communication patterns
Contributions
F
Incoming signaling line plots
Cophenetic
Silhouette
Measure score
Number of patterns
G
Incoming cell patterns
H
Incoming communication patterns
Contributions
I
Incoming communication patterns of fibroblasts
Subsets
Patterns
Signaling pathways
Contribution
Angptl7+
αSMA+
IL−6+
Dpp4+
Prg4+
Sox9+
Mki67+
Pattern 1
Pattern 2
Pattern 3
Pattern 4
Pattern 5
Pattern 6
Pattern 7
Periostin (PERIOSTIN) 0.384
Laminin-integran (LAMININ) 0.506
Pleiotrophin (PTN) 0.381
Angiopoietin-like (ANGPTL) 0.322
Macrophage inhibitory factor (MIF) 0.478
Midkine (MK) 0.387
Heparan sulfate proteoglycans (HSPG) 0.344
GAS6-TAM (GAS) 0.516
Insulin-like growth factor (IGF) 0.411
CXCL signaling (CXCL) 0.588
TGF-β (TGFb) 0.332
Protein S-TAM (PROS) 0.561
Galectin (GALECTIN) 0.562
Visfatin (VISFATIN) 0.323
Chemerin (CHEMERIN) 0.541
CD90/THY1 (THY1) 0.491
Bone sialoprotein (BSP) 0.313
Amyloid precursor protein (APP) 0.437
PTP receptor type M (PTPRM) 0.398
CCL 0.410
Interleukin 6 (IL6) 0.379
Calcitonin (CALCR) 0.886
Semaphorin 6 (SEMA6) 0.409
Endothelin (EDN) 0.614
Hepatocyte growth factor (HGF) 0.417
Thrombospondin (THBS) 0.306
Tenascin (TENASCIN) 0.352
TNF-related weak inducer of apoptosis (TWEAK) 0.335
Fibroblast growth factor (FGF) 0.311
Myelin protein zero (MPZ) 0.319
R-spondin (RSPO) 0.999
RANK ligand (RANKL) 0.965
Activin-inhibin (ACTIVIN) 0.742
Neurotrophin (NT) 0.821
Ephrin-A (EPHA) 0.420
Growth differentiation factor (GDF) 0.652
Leukemia inhibitory factor receptor (LIFR) 0.566
CCL 0.590
Cell adhesion molecule (CADM) 0.779
Angiopoietin (ANGPT) 0.999
Vascular cell adhesion molecule (VCAM) 0.460
Ephrin-B (EPHB) 0.339
Chondroadherin (CHAD) 0.368
Vascular endothelial growth factor (VEGF) 0.999
Leukemia inhibitory factor receptor (LIFR) 0.434
Hepatocyte growth factor (HGF) 0.413
Interleukin 1 (IL1) 0.999
Glial-derived neurotrophic factor (GDNF) 0.999