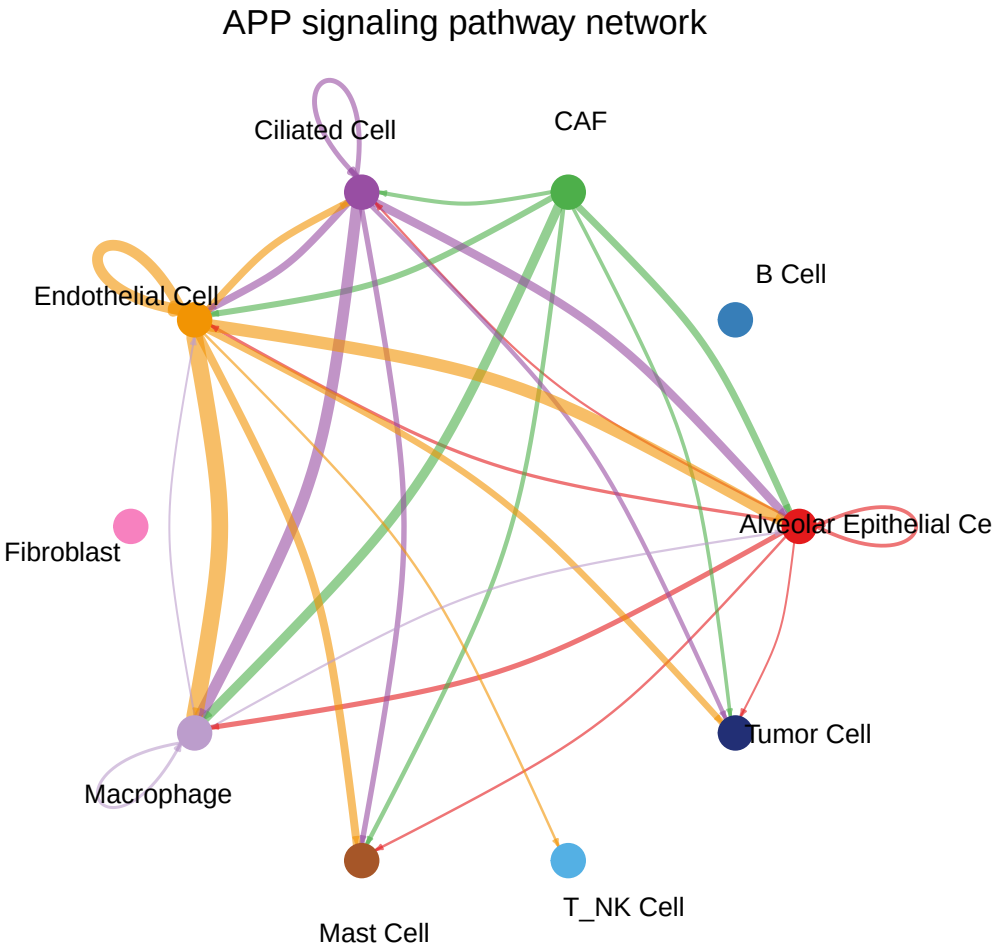
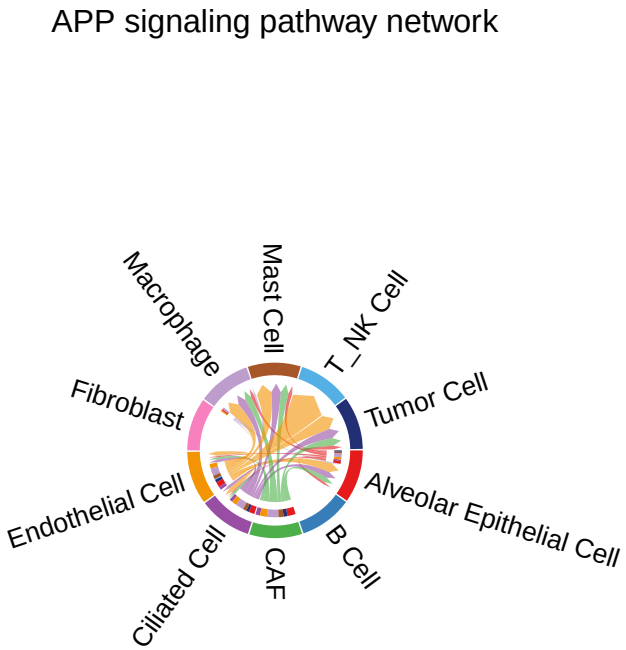
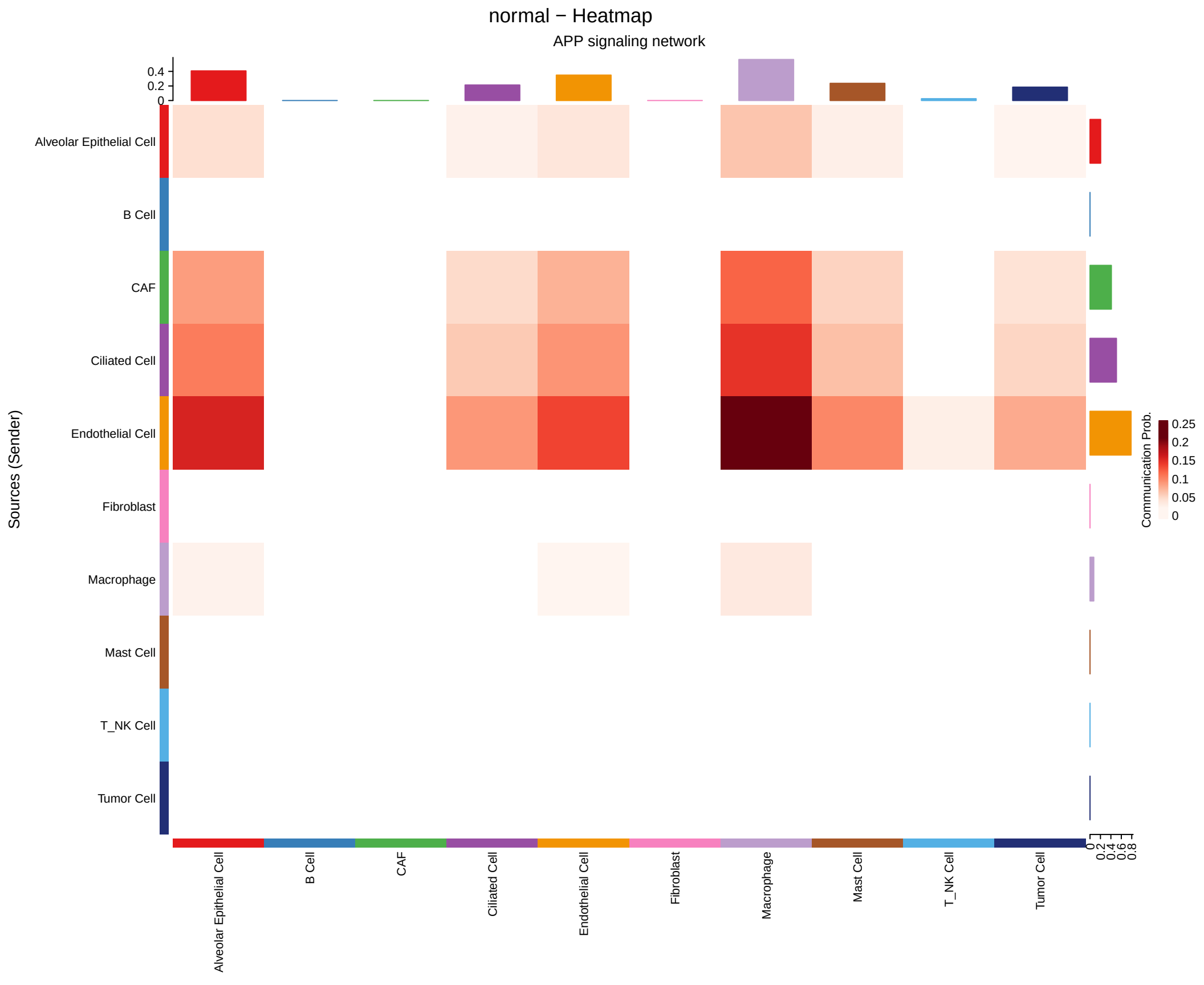
normal − Circle

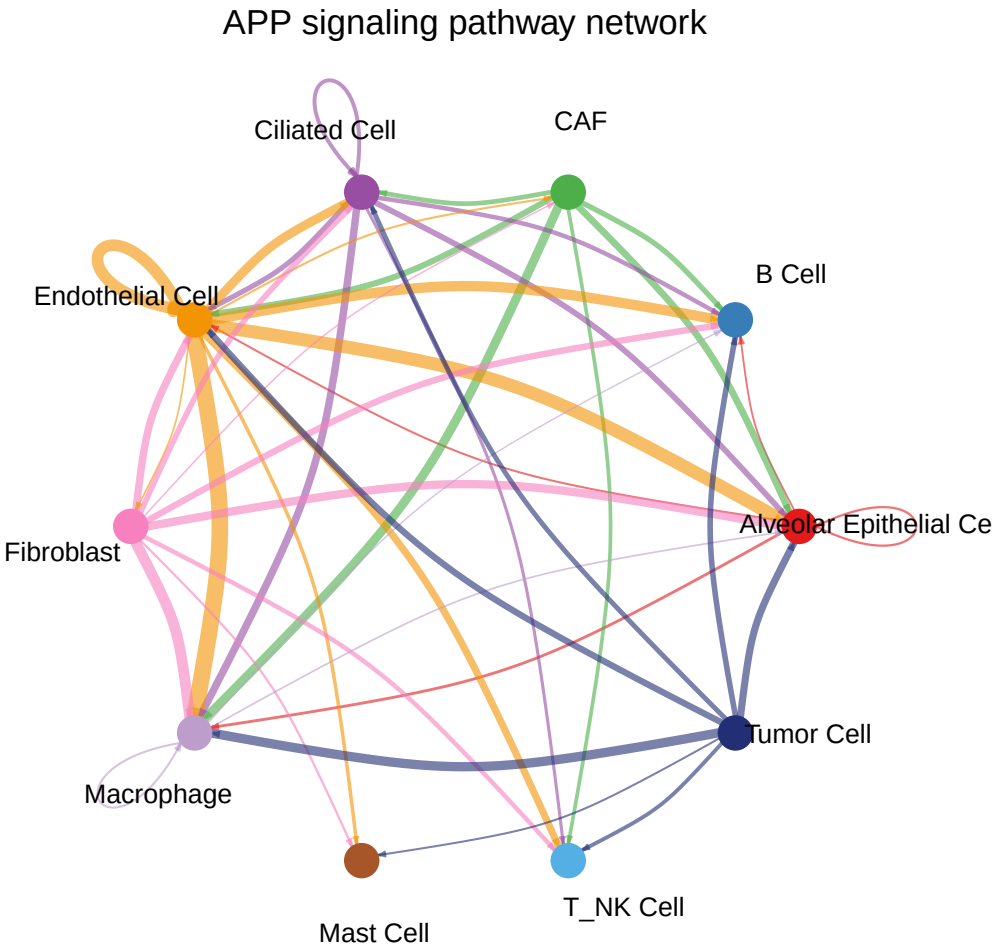


normal − Chord

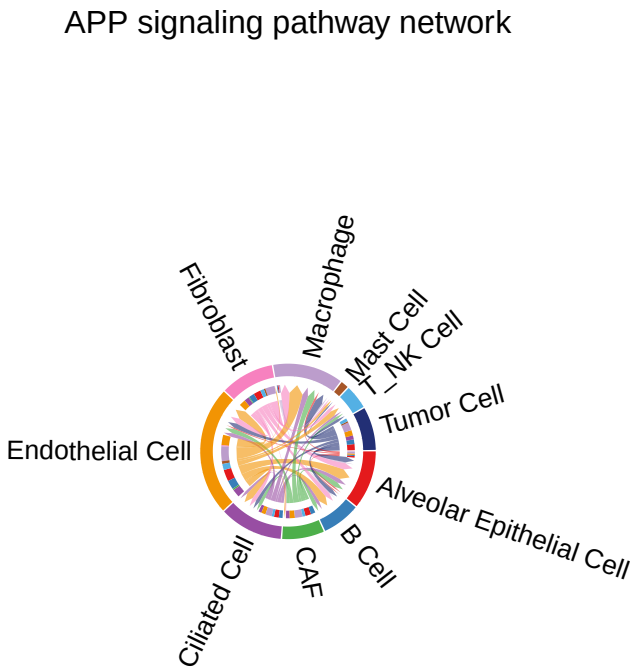


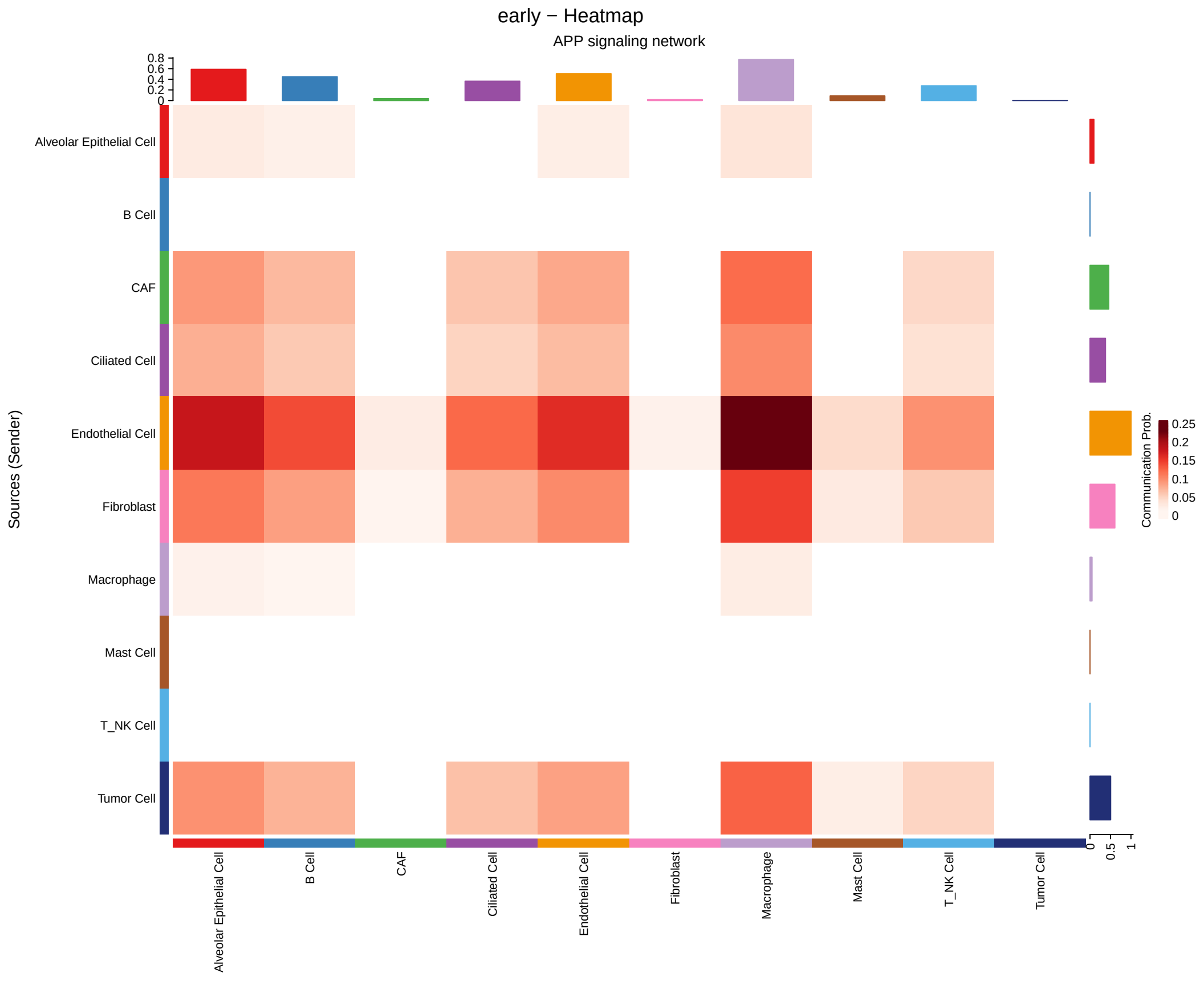

normal − Heatmap
APP signaling network
0.4
0.2
0
Alveolar Epithelial Cell
B Cell
CAF
Ciliated Cell
Endothelial Cell
Fibroblast
Macrophage
Mast Cell
T_NK Cell
Tumor Cell
Sources (Sender)
Communication Prob.
0.25
0.2
0.15
0.1
0.05
0
0
0.2
0.4
0.6
0.8

early − Circle

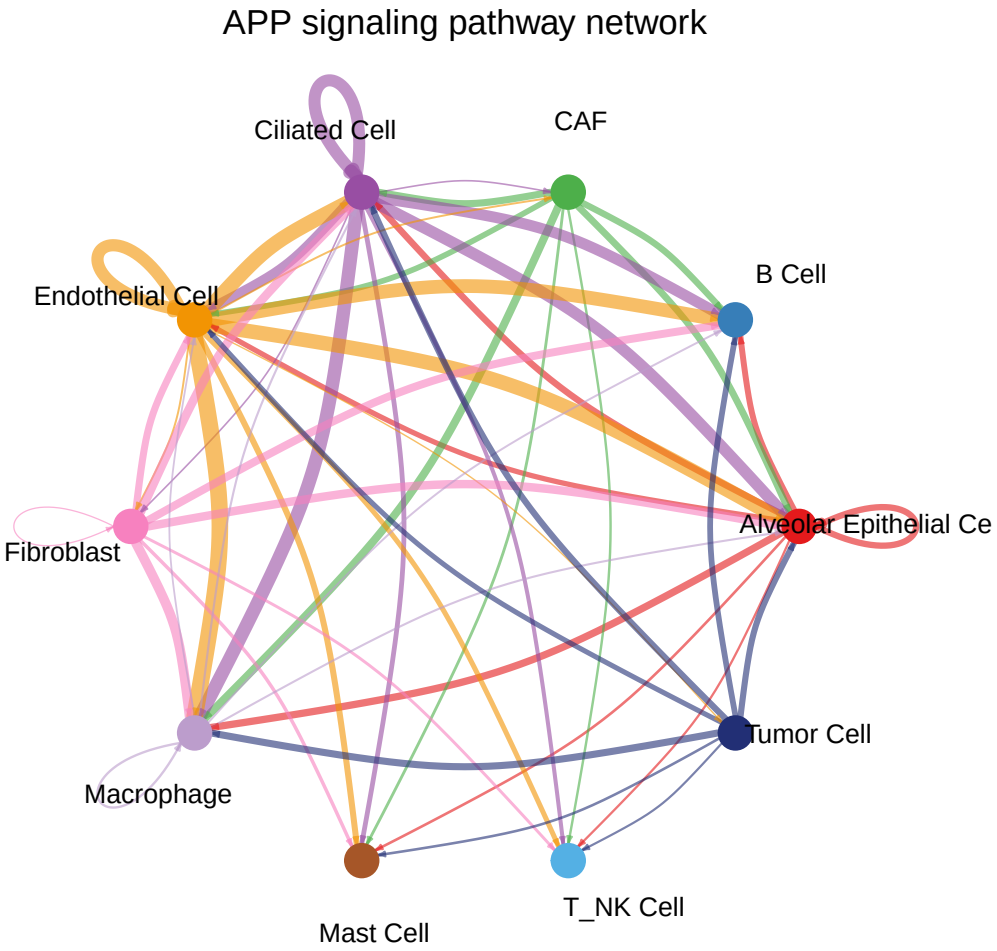


early − Chord

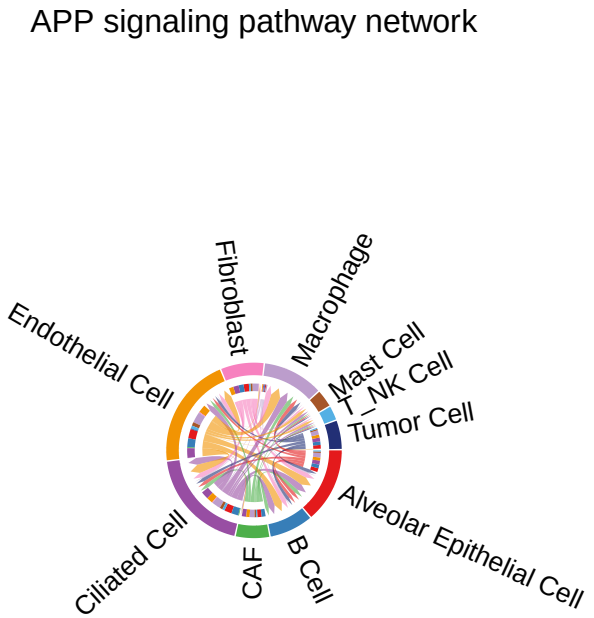


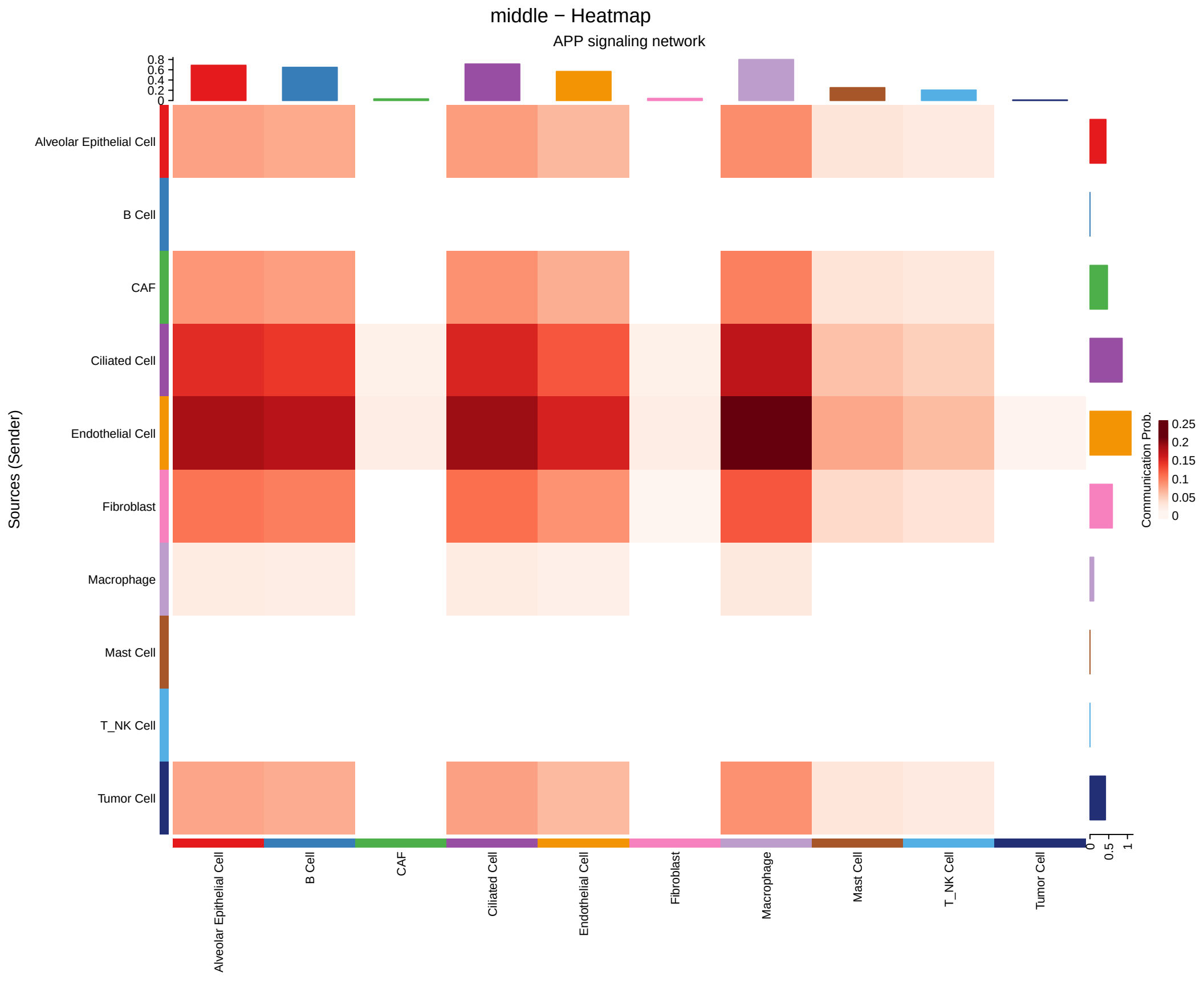

early − Heatmap
APP signaling network
0.8
0.6
0.4
0.2
0
Alveolar Epithelial Cell
B Cell
CAF
Ciliated Cell
Endothelial Cell
Fibroblast
Macrophage
Mast Cell
T_NK Cell
Tumor Cell
Sources (Sender)
Communication Prob.
0.25
0.2
0.15
0.1
0.05
0
0
0.5
1

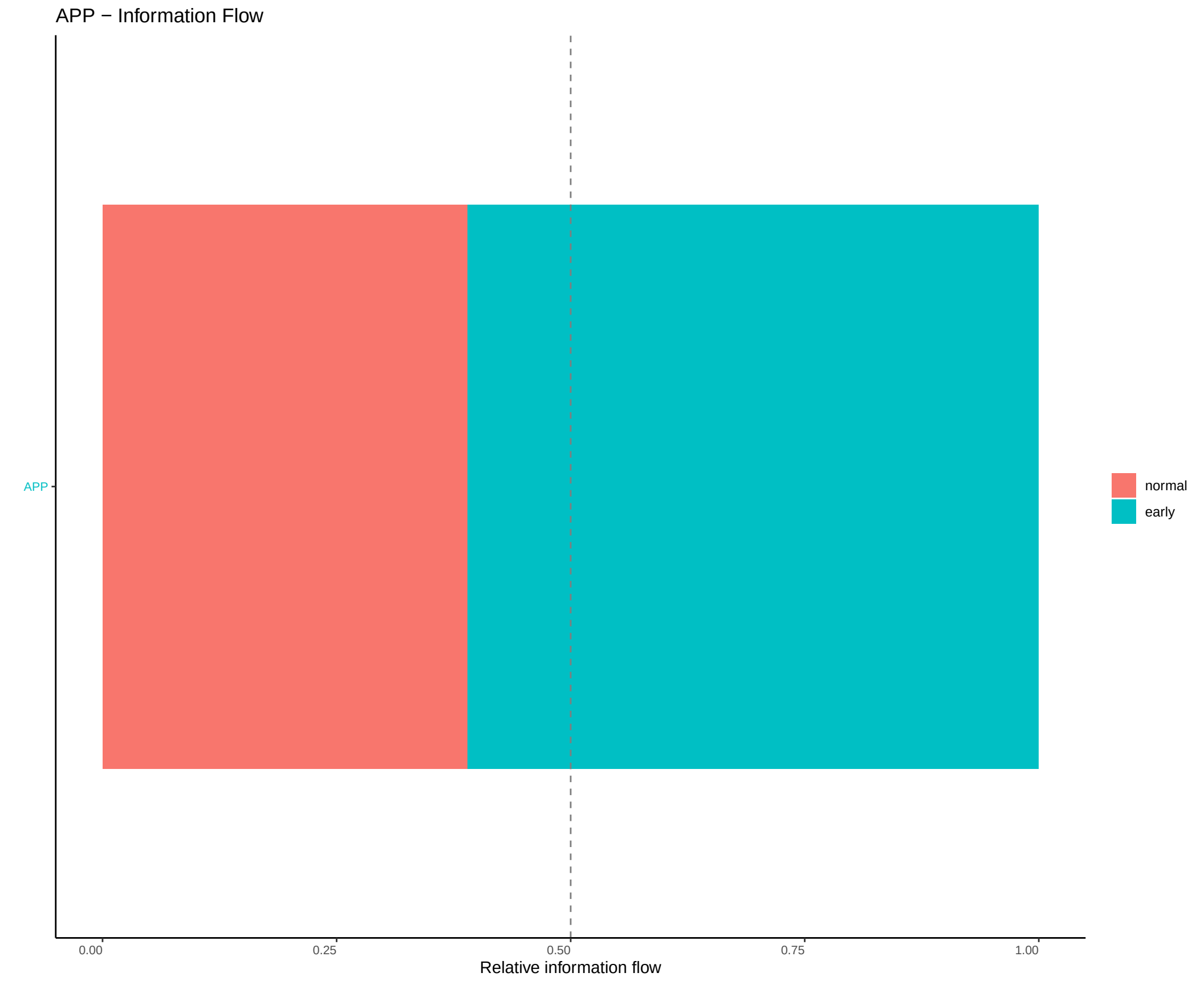
middle − Circle



middle − Chord




middle − Heatmap
APP signaling network
0.8
0.6
0.4
0.2
0
Alveolar Epithelial Cell
B Cell
CAF
Ciliated Cell
Endothelial Cell
Fibroblast
Macrophage
Mast Cell
T_NK Cell
Tumor Cell
Sources (Sender)
Communication Prob.
0.25
0.2
0.15
0.1
0.05
0
0
0.5
1


APP − Information Flow
APP
normal
early
0.00
0.25
0.50
0.75
1.00
Relative information flow