Ligand–receptor pairs in each dataset (count >= 2) File Name Total Irps: 6,676 CCIDB\_Human\_new.xlsx (1) CellCall-2021\_new.xlsx (2) 6,000 CellChatDB.humanv2-2023-Jin-LR-pairs\_new.xlsx (3) Cellinker\_Homos\_2021.txt (4) Human-2010-Kirouac-LR-pairs new.xlsx (5) 5,000 Human-2014-Qiao-LR-pairs.xlsx (6) Human-2015-Choi-LR-pairs.txt (7) 4,100 Total Number of Irps 4,000 Human-2015-Ramilowski-LR-pairs.xlsx (8) 3,588 Human-2017-Pavlicev-LR-pairs.xlsx (9) 3,392 Human-2019-Wang-LR-pairs.csv (10) 3,18119 3,000 Human-2019-Ximerakis-BaderLab-2017\_new2.xlsx (11) 2,422 2,565 Human-2020-Hou-LR-pairs.xlsx (12) 2.23.255 Human-2020-Shao-LR-pairs.txt (13) 1,952 2,000 Human-2022-Dimitrov-LR-pairs.csv (14)

