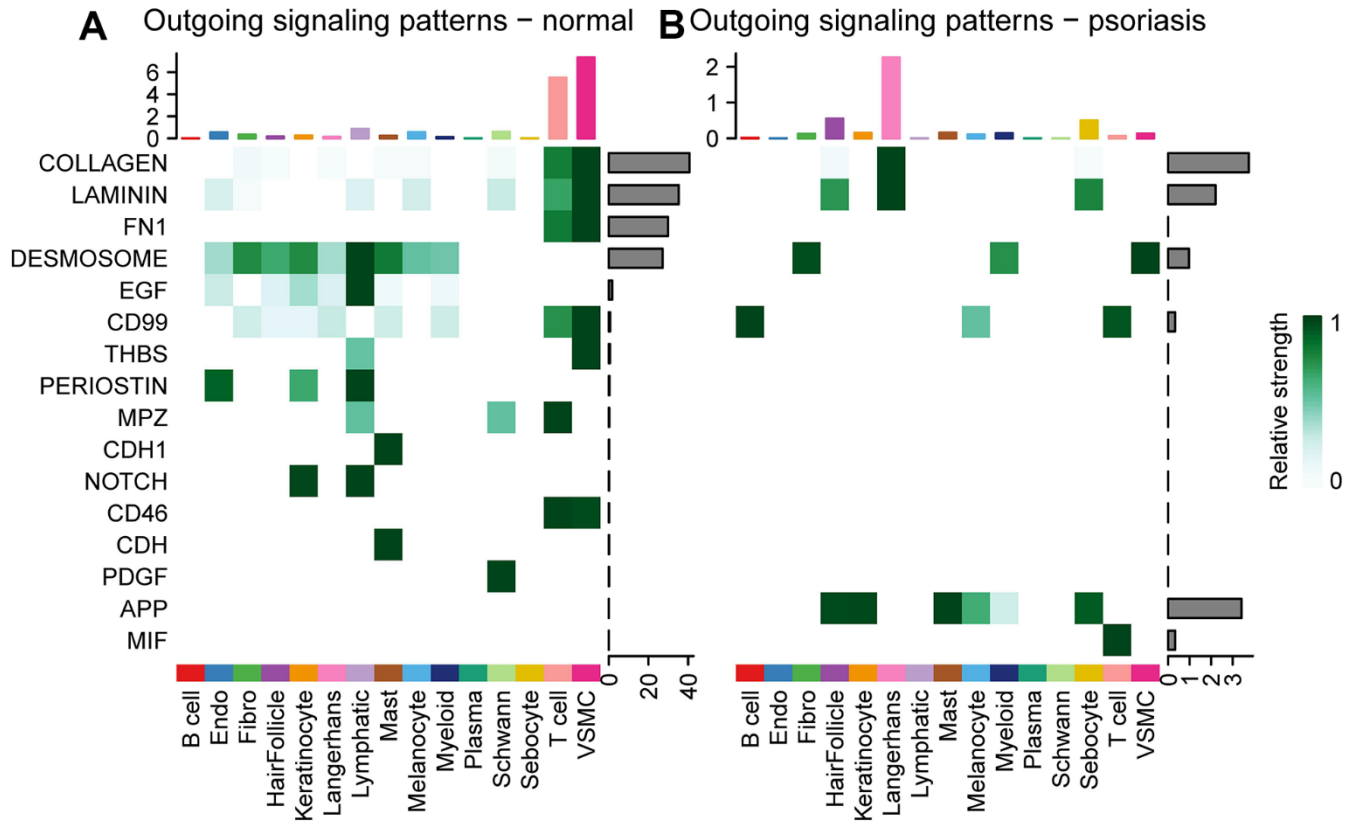
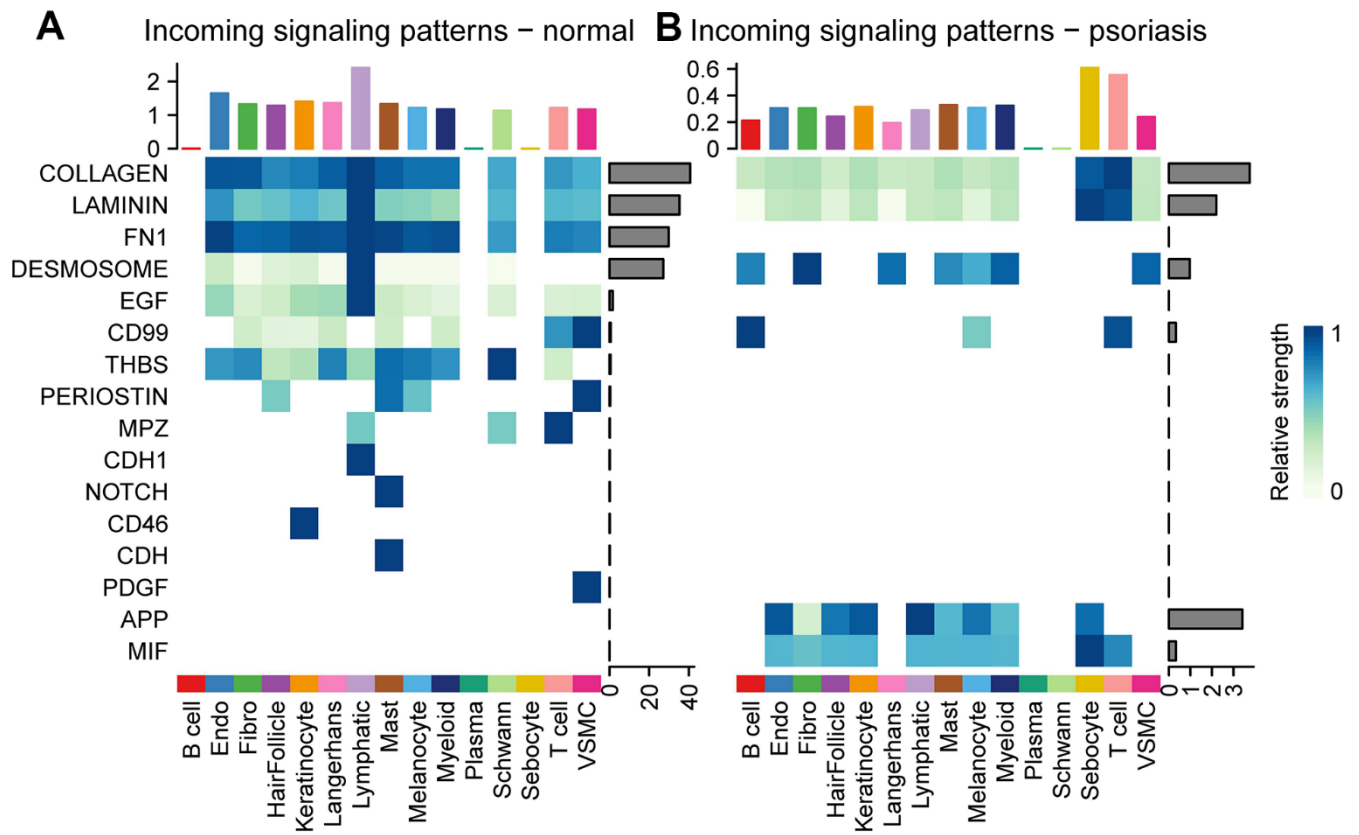


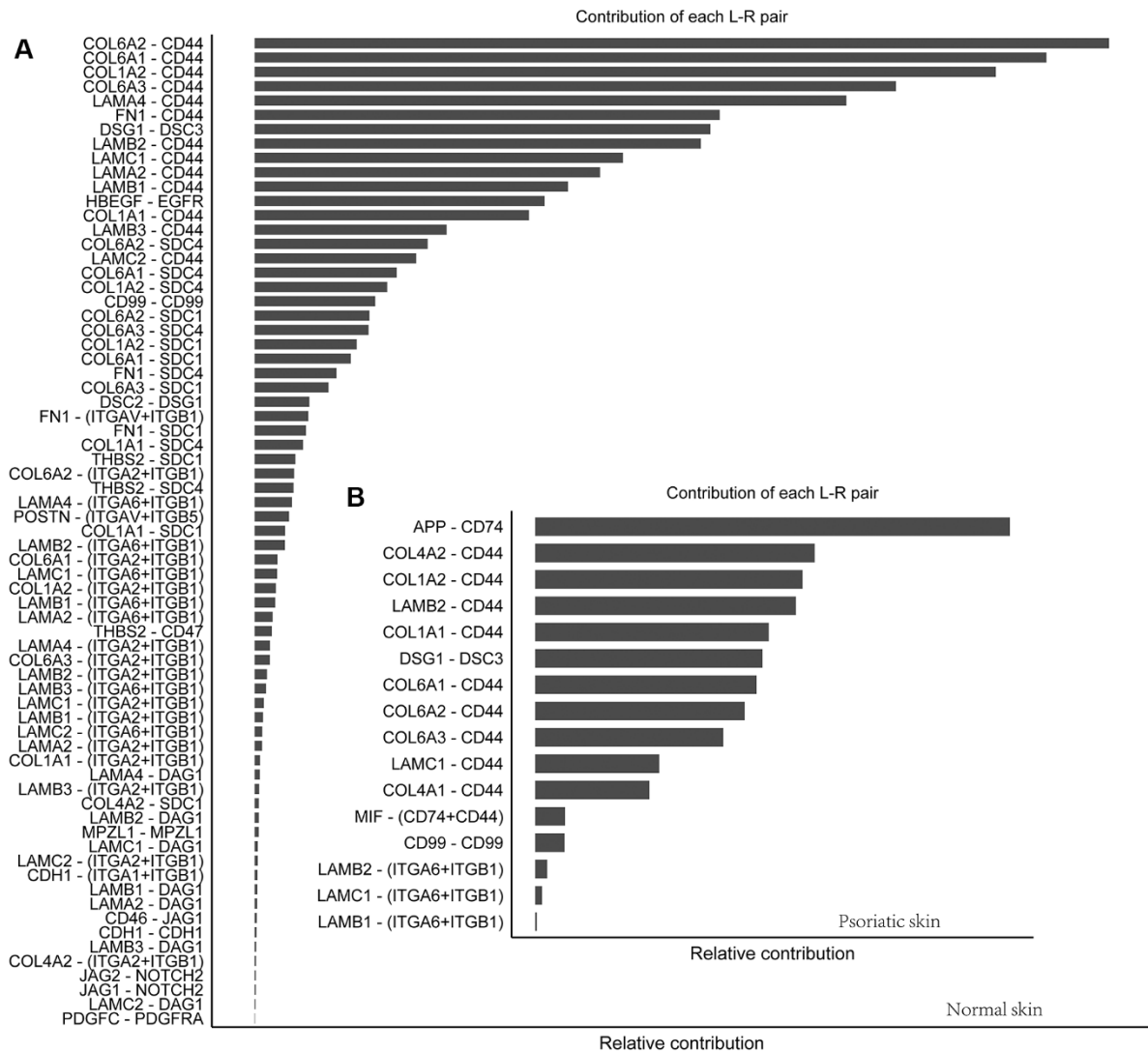
SUPPLEMENTARY FIGURES



Supplementary Figure 1. Outgoing signaling patterns for each subtype of cells in psoriatic and normal skin. (A) normal skin. (B) psoriasis.



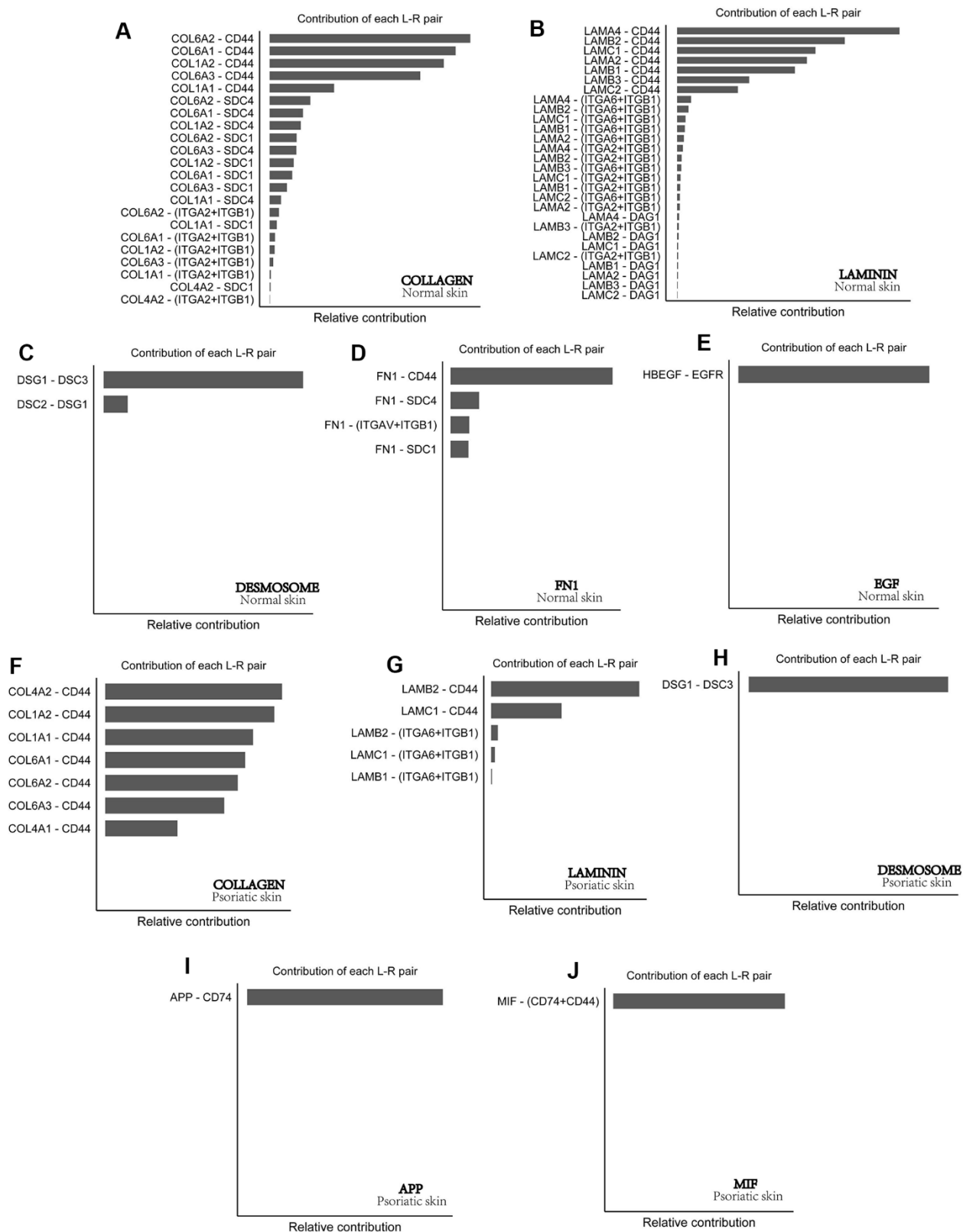
**Supplementary Figure 2. Incoming signaling patterns for each subtype of cells in psoriatic and normal skin. (A) normal skin. (B) psoriasis.**



**C**

Detection status	Proportion	Ligand receptor
Detectable proteins in pathology sections	36 (36/80, 45%)	COL1A1, COL1A2, COL4A1, COL4A2, COL6A1, COL6A2, COL6A3, LAMA4, LAMA5, LAMB1, LAMB2, LAMC1, APP, DSC1, DSG1, NAMPT, MIF, ANGPTL2, THBS1, HSPG2, CD99, GRN, SELPLG, ITGA1, CD44, SDC1, ITGA6, DAG1, CD74, DSC3, NCL, CDH5, CD47, SORT1, ITGB1, ITGB4
Unidentified protein at the pathology section	44 (44/80, 55%)	MDK, TNFSF10, ANGPTL4, DLL1, DLL4, JAG2, VEGFB, PGF, APLN, SELE, TNF, MPZL1, ADM, EFNA1, EFNA5, SEMA6A, ICOSL, EFNB1, EFNB2, IGF2, SEMA7A, EDN1, TNFSF12, ITGA9, ITGA10, SDC4, INSR, ACKR3, TNFRSF10B, TLR4, NOTCH1, NOTCH4, VEGFR1, APLNR, TNFRSF1B, CALCRL, EPHA1, EPHA4, PLXNA2, ICOS, CTLA4, EDNRB, TNFRSF12A, CXCR2

**Supplementary Figure 3. Contribution of ligand receptors (L-R) in normal skin and psoriatic skin. (A)** Contribution of ligand-receptor pairs in normal skin. **(B)** Contribution of ligand-receptor pairs in psoriatic skin. **(C)** Expression of ligand receptor pairs in pathological tissue sections and the proportion of them detected. The data show that all ligand receptor pairs have been detected in psoriasis and that a relatively high proportion of ligand receptors in normal skin have also been detected for the most part.



**Supplementary Figure 4. Contribution of ligand receptor (L-R) in different signaling pathways in psoriasis and normal skin.** (A–E) Contribution of ligand receptor pairs in five signaling pathways (COLLAGEN, LAMININ, FN1, DESMOSOME and EGF) in normal skin. (F–J) Contribution of ligand receptor pairs in five signaling pathways (COLLAGEN, LAMININ, DESMOSOME, APP and MIF) in psoriatic skin.