Reprogramming to pluripotency does not require transition through a primitive streak-like state

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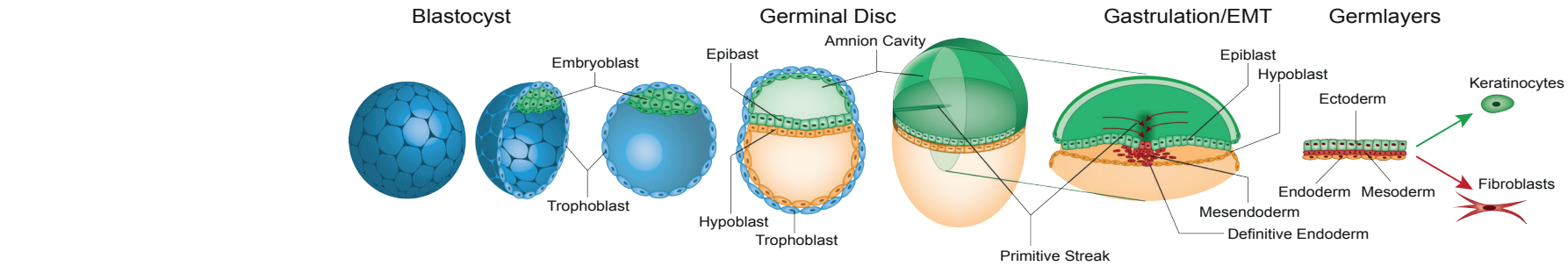
Supplemental figure legend

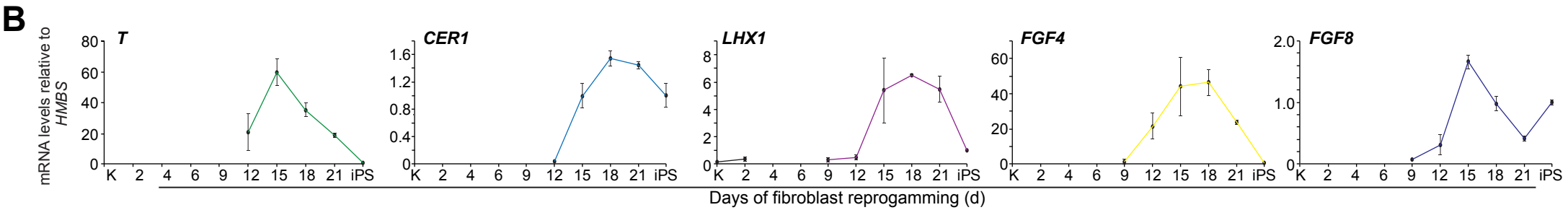
Supplemental figure 1: Expression profiles of human somatic cells during reprogramming display primitive streak and mesendoderm signatures

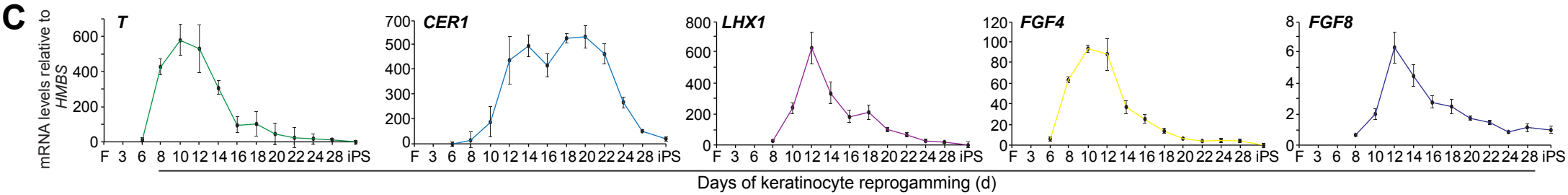
(A) Schematic overview of the epithelial-to-mesenchymal transition (EMT) and the early steps of human embryonic development. The blastocyst includes the first differentiated cells in human development – the pluripotent inner cell mass or embryoblast and the trophoblast. The pluripotent embryoblast cells differentiate to the so called germinal disc, composed of epiblast and hypoblast. Gastrulation starts when cells of the epiblast form the primitive streak undergo EMT and migrate between hypo- and epiblast. The cells integrating and exchanging the former hypoblast give rise to the endoderm. The cells between the two disks differentiate to mesoderm, while the remaining cells in the epiblast have ectodermal fate. Keratinocytes are known to differentiate from the ectoderm while fibroblasts are of mesoderm origin. (**B**,**C**) Expression patterns during reprogramming of fibroblasts (**B**) keratinocytes (**C**). Single marker gene profiles for genes expressed during primitive streak and mesendoderm formation in reprogramming keratinocytes and fibroblasts towards pluripotency are shown.

Supplemental figure 2: Expression profile for Eomesodermin (Eomes) during reprogramming of mouse embryonic fibroblasts. Time points as indicated.

Supplemental Figure 1







Supplemental Figure 2