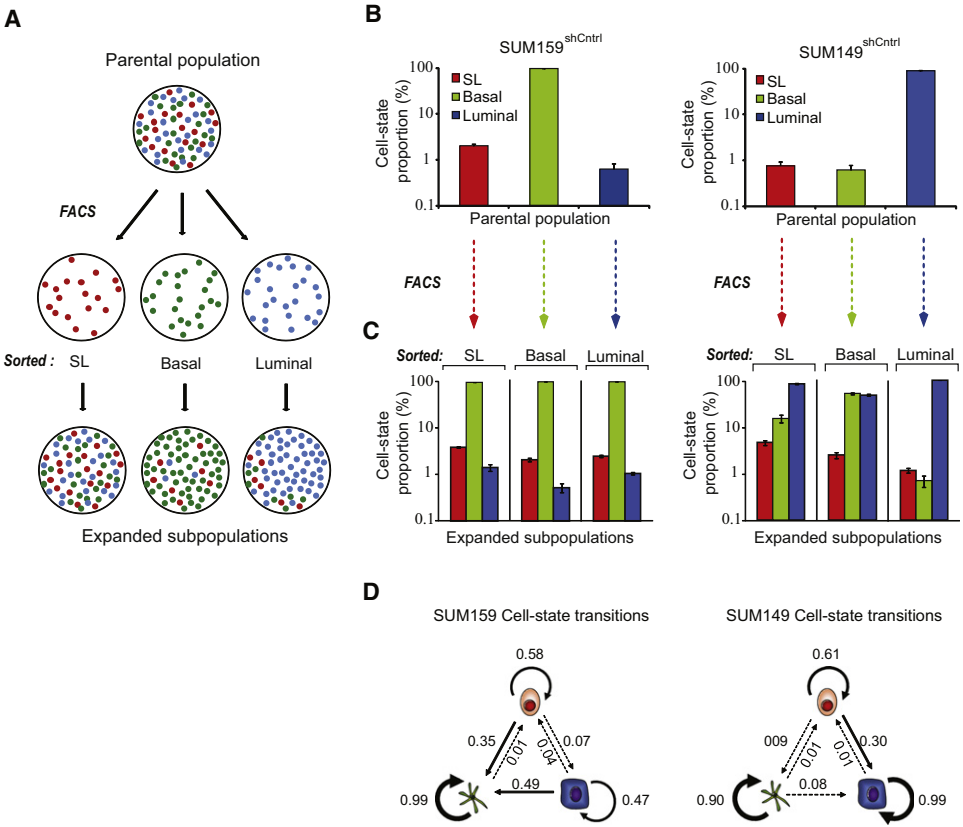

Figure 2. Determination of Breast Cancer Cell-State Transition Probabilities from Population Cell-State Proportions

(A) Schematic of experimental procedure used to determine cell-state transition dynamics.

(B) Proportions of cell-states in parental SUM159^{shCntrl} and SUM149^{shCntrl} breast cancer lines.

(C) Cellular subpopulations in stem-like (SL), basal, or luminal states were isolated by FACS with antibodies directed against the CD44, CD24, and EpCAM cell-surface antigens. Bar charts show the proportion of cells in each cell-differentiation state as assessed by FACS after in vitro culture for 6 days.

(D) Lineage hierarchies for the SUM159^{shCntrl} and SUM149^{shCntrl} lines were calculated from the data in (C). The corresponding cell-state transition probabilities for each cell line are shown. Solid arrows denote transition probabilities greater than 0.1. Dashed arrows denote transition probabilities between 0.01 and 0.1.

See also Figure S1.