Table.S 5. Reprogramming path characterized by high/low expression level of 22 marker genes in Figure 3 of main text. The line of gene ID represent the corresponding genes in Table S1. From the line differentiation to line stem cell, every line represents a cellular states. Stem cell represent the stem cell states, and differentiation represents differentiation states. 1 denotes high expression level, and 0 represents low expression level.

gene ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Differentiation	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	0	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	0	1	1	1	1
	1	1	1	1	0	1	0	0	0	0	0	0	1	1	1	0	1	0	1	1	1	1
	1	1	1	1	0	1	1	0	0	0	1	0	1	1	1	0	0	0	1	1	1	1
	1	1	1	1	0	1	1	0	0	0	1	0	1	1	1	0	0	0	0	1	1	1
	1	1	1	1	1	1	1	0	1	0	1	0	1	1	1	0	0	0	0	1	1	0
	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	0	0	0	1	1	0
	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	0	0	0	0	1	1	0
	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	0	0	0	0	0	1	0
Stem cell	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0