Table S1. Clonal analysis of BMP4 effects on astrocyte differentiation

	Control	BMP4
Total progeny	124	102
GFAP ⁺	27 (22%)	98 (96%)
BrdU ⁺	34 (27%)	1 (1%)
Death	7 (6%)	3 (3%)

Clonal analysis was performed on 100 P1 cells plated individually in Terasaki wells under control conditions (EGF 10 ng/ml), and on 100 cells plated in the presence of BMP4 (10 ng/ml BMP4 + EGF 10 ng/ml). Cells were pulsed with BrdU for 12 hours to assay proliferation, live/dead staining was performed to assess cell death, and GFAP immunocytochemistry was performed on day 7 to assay astrocyte differentiation. BMP treatment prompted exit from the cell cycle (lack of BrdU incorporation) without altering cell survival, and 96% of the cells expressed GFAP. Thus, BMP4 acts as an instructive rather than stochastic/selective cue to promote astrocyte differentiation.