

Fig. E-1
Histochemical analysis of alkaline phosphatase activity induced by BMPs in osteogenic progenitor and osteoblastic cells. Subconfluent C3H10T1/2 (A), C2C12 (B), and TE-85 (C) cells were infected with AdBMPs and AdGFP. At five days after infection, alkaline phosphatase activity (stained as purple-blue) was determined histochemically with use of naphthol AS-MX/fast blue BB mix as a substrate. Representative results from three independent experiments are shown.

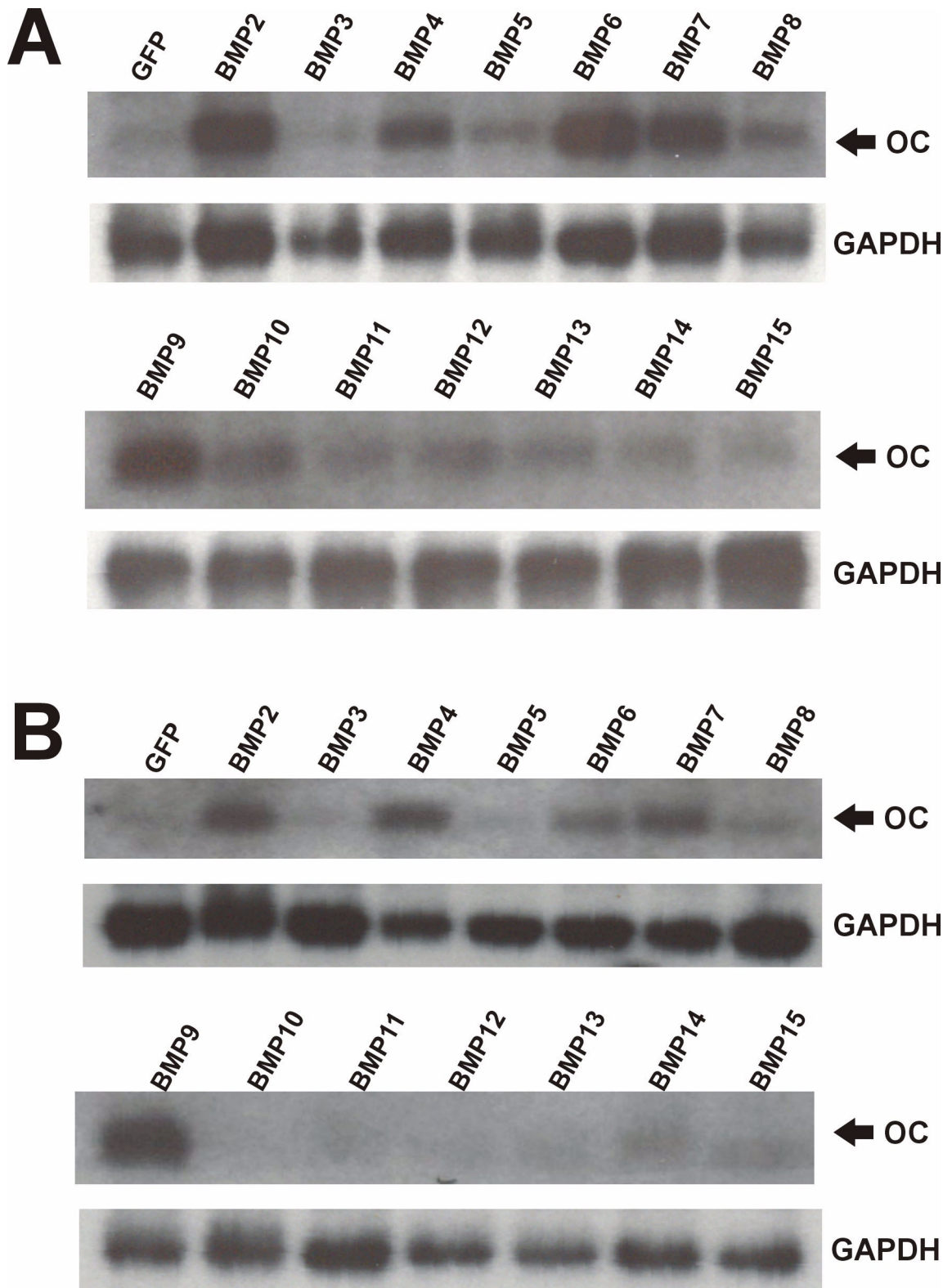


Fig. E-2

BMP-induced expression of osteocalcin in osteogenic progenitor cells. C3H10T1/2 (A) and C2C12 (B) cells were infected with AdBMPs and AdGFP. At seven days (for C2C12) or ten days (for C3H10T1/2) after infection, total RNA was isolated and 5 μ g of total RNA was subjected to Northern blot analysis with a 32 P-labeled DNA probe specific for mouse osteocalcin. The same blots were reprobed with a control probe derived from mouse GAPDH.

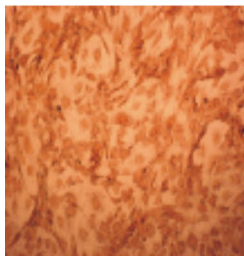
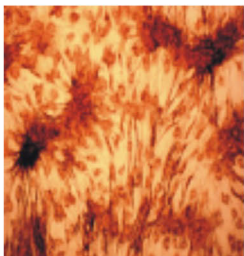
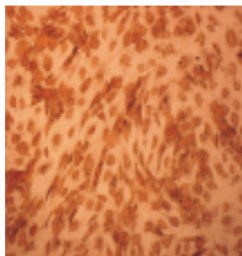
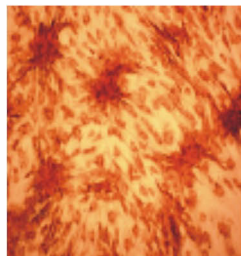
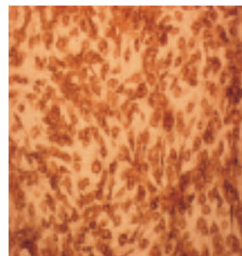
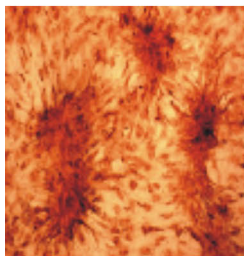
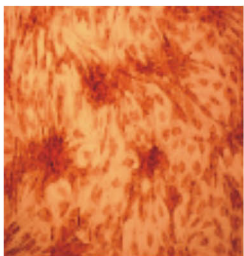
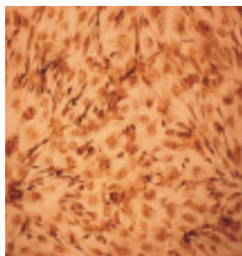
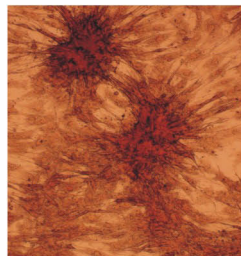
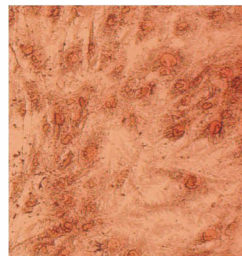
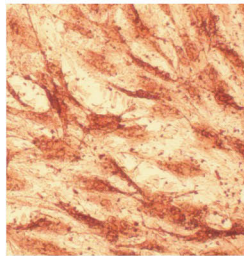
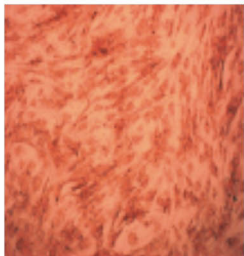
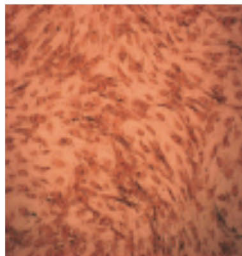
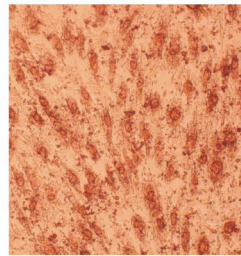
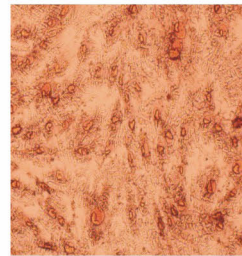
GFP**BMP2****BMP3****BMP4****BMP5****BMP6****BMP7****BMP8****BMP9****BMP10****BMP11****BMP12****BMP13****BMP14****BMP15**

Fig. E-3

Matrix mineralization induced by BMPs. C3H10T1/2 cells were infected with AdBMPs and AdGFP. At twenty-one days after infection, mineralization (stained as red nodules) was determined by alizarin red S staining. Representative results from three independent experiments are shown.