# Supplementary Fig. 1



#### Supplementary Fig. 1 Appearance, skeletal system, and histological analysis of wild-type

### and *Antxr1* tg F<sub>0</sub> embryos with high transgene expression at E18.5

(A-F) Appearance (A, B), whole skeletal preparation (C, D), and magnified view of the tibiae and fibulae (E, F) of wild-type (A, C, E) embryo and *Antxr1* tg (B, D, F)  $F_0$  embryo with high transgene expression. *Antxr1* expression in the tg embryo was 18.8-times higher than that in wild-type embryos. The arrow in F indicates ectopic mineralization in the cartilage in tibia. (G-J) Double-staining with H-E and von Kossa using sagittal sections of the trunk from wild-type (G) and *Antxr1* tg (I)  $F_0$  embryos. The boxed regions in G and I are magnified in H and J, respectively. The arrow in J indicates ectopic mineralization in vertebral body. Scale bars: 1 mm (A-F, G, I), 100 µm (H, J).

## Supplementary Table 1 Primer sequences for real-time RT-PCR and CHIP

### real-time RT-PCR

|                | Forward              | Reverse              |
|----------------|----------------------|----------------------|
|                | 5'3'                 | 5'3'                 |
| $\beta$ -actin | CCACCCGCGAGCACAGCTTC | TTGTCGACGACCAGCGCAGC |
| Runx2          | CCGCACGACAACCGCACCAT | CGCTCCGGCCCACAAATCTC |
| Antxr1         | TACGGAGGATTCGACCTCTA | TGTTCCCTGTCCTCAGTTAG |

### CHIP

| CHIP                |                         |  |
|---------------------|-------------------------|--|
|                     | 5'3'                    |  |
| 0.85-kb enhancer F1 | ACAAGGCTTTCCTCTTGAGGGTC |  |
| 0.85-kb enhancer R1 | CTTGTGGGAAATCAGCAGGG    |  |
| 0.85-kb enhancer F2 | AGAGTCATGCTTACCGCAGG    |  |
| 0.85-kb enhancer R2 | CATACGCTCAGCTCCACCAA    |  |