Khavandgar et al., http://www.jcb.org/cgi/content/full/jcb.201102051/DC1

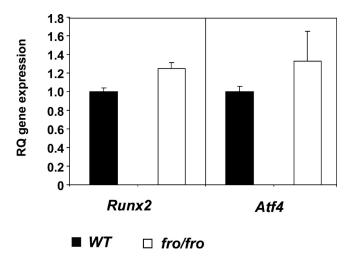


Figure S1. **qRT-PCR analysis of** *Runx***2** and *Atf***4** expression in newborn *fro/fro* bones. The qRT-PCR expression analysis of total RNA shows that *Runx***2** and *Atf***4** expression in the bones from newborn *fro/fro* mice are normal. Error bars represent standard deviations. RQ, relative quantification.

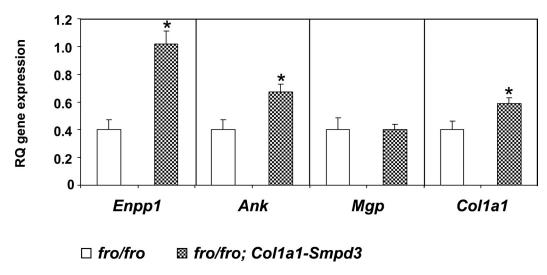


Figure S2. The comparative expression analysis of Enpp1, Ank, Mgp, and Col1a1 by qRT-PCR in the parietal bones of fro/fro and fro/fro;Col1a1-Smpd3 mice. Enpp1 expression is \sim 2.5-fold up-regulated, whereas there is a mild but significant up-regulation of Ank and Col1a1 expression in the bones from newborn fro/fro;Col1a1-Smpd3 mice in comparison with that of their fro/fro littermates. Mgp expression remains unchanged. Error bars represent standard deviations. *, P < 0.05. RQ, relative quantification.

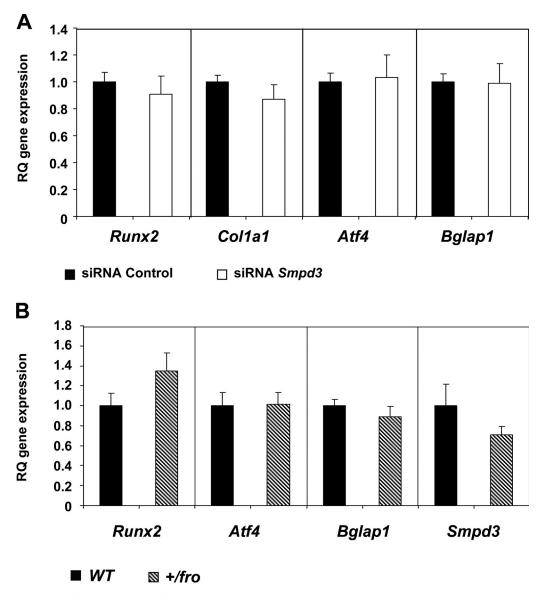


Figure S3. qRT-PCR analysis of Runx2, Col1a1, Atf4, and Bglap1 expression in the control and Smpd3 siRNA-treated MC3T3-E1 cells and Runx2, Atf4, Bglap1, and Smpd3 expression in WT and +/fro mice. (A) Runx2, Col1a1, Atf4, and Bglap1 expressions are not altered in Smpd3 siRNA-transfected MC3T3-E1 cells, in comparison with the control siRNA-transfected cells. (B) No significant alteration of Runx2, Atf4, Bglap1, and Smpd3 expression was seen in the +/fro bones when compared with those from their WT littermates. The qRT-PCR expression analysis was performed on the total RNA extracted from the parietal bones of the newborn mice. Error bars represent standard deviations. RQ, relative quantification.