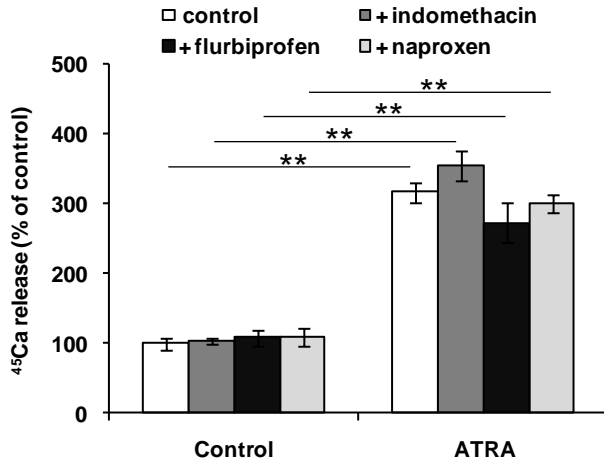
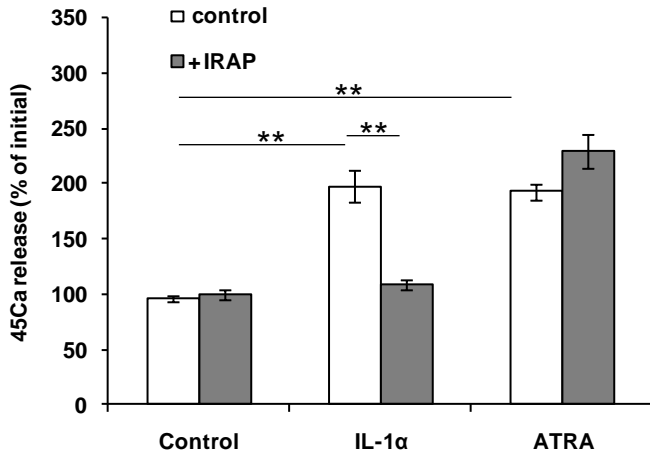
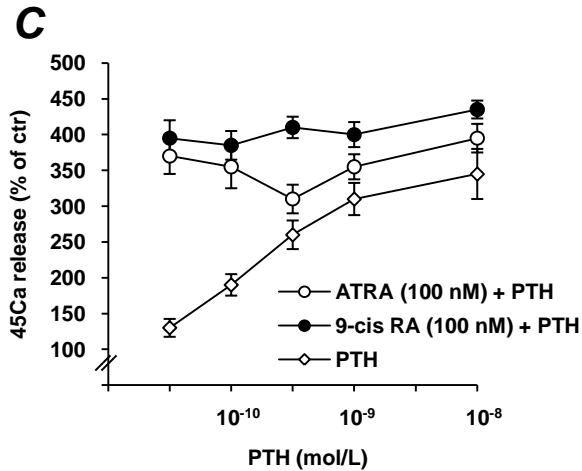
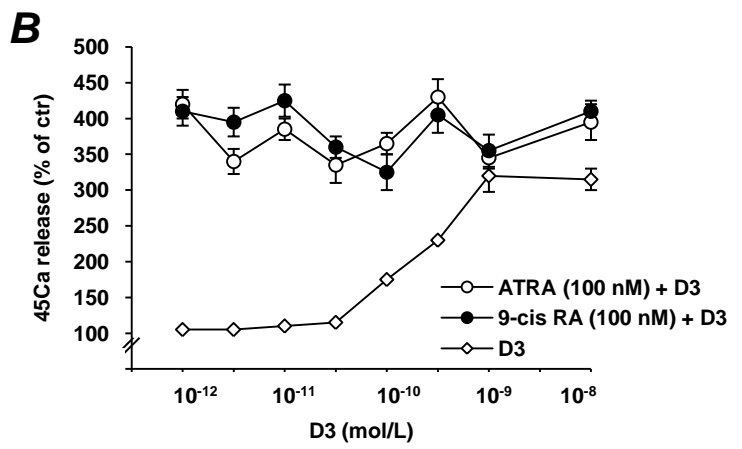
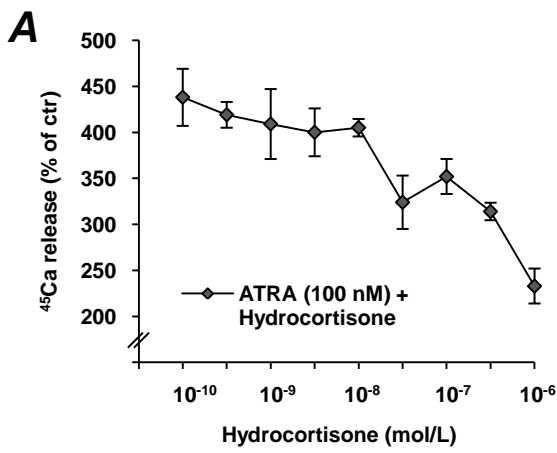


Supplemental 1. *All-trans*-retinoic acid (ATRA;  $10^{-7}$ M) stimulated  $^{45}\text{Ca}$  release and  $^3\text{H}$  release from calvarial bones prelabelled *in vivo* with  $^{45}\text{Ca}$  and  $^3\text{H}$ -proline, respectively, to the same degree as parathyroid hormone (PTH;  $10^{-8}$ M) and 1,25(OH) $_2$ -vitamin D $_3$  (D3;  $10^{-7}$ M). Bones were cultured for 120 h in the presence of the different hormones and percentage release of  $^{45}\text{Ca}$  and  $^3\text{H}$  analyzed as described in Materials & Methods. The stimulatory effects by the hormones were statistically different from untreated controls ( $p < 0.01$ ). Values are means of 4 or 5 observations; vertical bars=SE.

**A****B**

Supplemental 2. The stimulatory effect by ATRA ( $10^{-7}$ M) on <sup>45</sup>Ca release from mouse calvarial bones is not affected by inhibitors of cyclo-oxygenases (**A**) or by inhibiting the IL-1 receptor (**B**). Bones were cultured for 120 h in the presence of ATRA without or with either indomethacin, flurbiprofen or naproxen (A) or in the presence of either IL-1α (150 pg/ml) or ATRA without and with the IL-1 receptor antagonist (IRAP; 100 ng/ml) and percentage release of <sup>45</sup>Ca analyzed as described in Materials & Methods. The cyclo-oxygenase inhibitors were used at a concentration ( $10^{-6}$ M) which was shown to abolish prostaglandin biosynthesis in the calvarial bones. Values are means of 4 or 5 observations; vertical bars=SE.



Supplemental 3. Hydrocortisone inhibited <sup>45</sup>Ca release stimulated by all-*trans*-retinoic acid (ATRA; 10<sup>-7</sup>M) in 120 h cultures in a concentration dependent manner (**A**). 1,25(OH)<sub>2</sub>-vitamin D3(D3; **B**) and parathyroid hormone (PTH; **C**) stimulated <sup>45</sup>Ca release from mouse calvarial bones without affecting the stimulatory effect by ATRA (10<sup>-7</sup>M) or 9-*cis* RA (10<sup>-7</sup>M). Values are means of 12-18 observations; vertical bars=SE (when larger than the radius of the symbol).