Fig. S1. RT-PCR analysis of G-CSF receptor expression by primary human osteoblasts and CAL-72 cells. No transcript of the G-CSF receptor could be detected in RNA extracted from primary human osteoblasts (pOB) or CAL-72 cells. TF-1 and KG-1a served as a positive control, the RNA quality was tested by a RT-PCR for β-actin.

Fig. S2. RT-PCR analysis of β-adrenergic receptor expression by human osteoblasts. Primary human osteoblasts (pOB) as well as the osteoblast-like cell lines CAL72, Saos2, G292 and Mg63 were investigated by RT-PCR analysis using primers specific for β₁- or β₂-adrenergic receptors. As a control water was included as a template.
Fig. S3. Clenbuterol treatment of primary human osteoblasts. (A) The cell height of primary human osteoblasts (measured by confocal microscopy of fluorescently labeled cells at the highest point of the cell) decreases with clenbuterol addition at concentrations as indicated on the x-axis. (B) The ratio of F- to G-actin is lower after treatment of primary osteoblasts with 10 μM clenbuterol. Mean ± s.e.m.; *P<0.05, ns: not significant (P>0.05, Student’s t-test).
Fig. S4. Schematic representation of the difference between the monolayer and individual cell height. The solid, double headed arrows indicate the individual cell height, while the dotted one on the right represents the monolayer height.

Fig. S5. Measurement of elastic moduli of cells. (A) Phase contrast image of a triangular cantilever tip armed with a microsphere. (B) Phase contrast image of a cantilever positioned over a cell nucleus before starting the measurement of the cell by indentation. (C) Schematic drawing of the indentation experiment. A laser beam is directed onto the tip of the cantilever and the reflected beam is detected. The cantilever approaches the cell over the nucleus and as it indents the cell, the cantilever bends and the position of the reflected laser beam changes on the detector. (D) From the obtained data, force distance curves are plotted (red, solid curve) and by fitting the curves using the Hertz model (blue, dashed line) the elastic modulus E of the cell is determined.