

## **HUMAN OSTEOLASTIC CELL LINE WITH STABLY KNOCKED-DOWN VITAMIN D RECEPTOR**

Vitamin D<sub>3</sub> is implicated in a myriad of biological responses, many of them mediated via the vitamin D receptor (“VDR”). Researchers at the University of California have developed a human osteoblastic cell line in which VDR activity is substantially and stably reduced.

The new VDR knockdown cell line provides an important tool for researchers studying vitamin D-mediated signaling and bone formation. This cell line also allows for the rapid screening of synthetic vitamin D analogs to distinguish activity mediated by VDR from non-VDR responses.

Current research tools for the study of VDR function include cell lines with transient VDR knockdown and also VDR knockout mice. UC’s cell line allows for long term, repeatable experiments that are not possible in transient assays. UC’s cell line is easier and cheaper to work with than VDR knock out mice.