## **RESEARCH REPORTS**

Biological

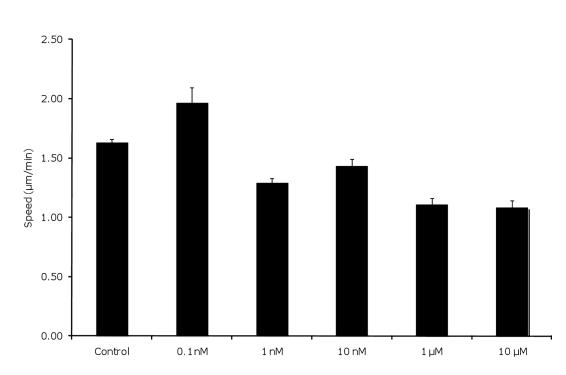
## P. Steenhuis<sup>1</sup>, R.E. Huntley<sup>1</sup>, Z. Gurenko<sup>1</sup>, L. Yin<sup>2</sup>, B.A. Dale<sup>2</sup>, N. Fazel<sup>1</sup>, and R.R. Isseroff<sup>1,3\*</sup>

<sup>1</sup>Department of Dermatology, University of California, Davis, School of Medicine, TB 192, One Shields Ave., Davis, CA 95616, USA; <sup>2</sup>Department of Oral Biology, University of Washington, Seattle, USA; and <sup>3</sup>Wound Service, Department of Veterans Affairs, Northern California Health Care System, Mather, CA, USA; \*corresponding author, rrisseroff@ucdavis.edu

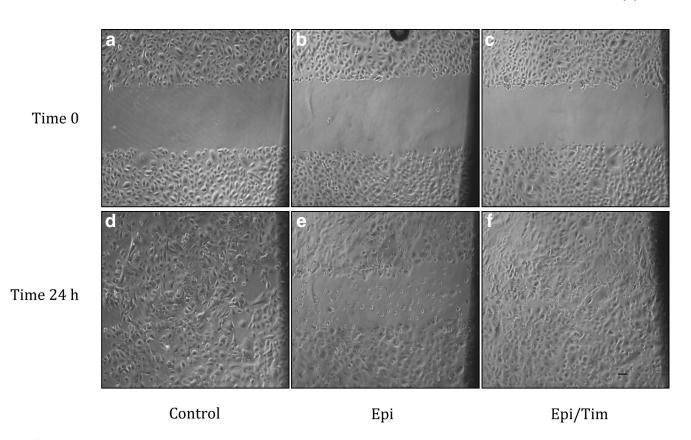
J Dent Res 90(2):186-192, 2011

## **APPENDIX**

## Adrenergic Signaling in Human Oral Keratinocytes and Wound Repair



**Appendix Figure 1.** Dose response of HOK migratory response to epinephrine. Cells were treated with growth medium alone (Control) or with various concentrations of epinephrine in the medium at 37°C for 30 min before imaging. Bars are mean values and standard errors of at least 3 experiments *per* treatment. Two separate cell strains isolated from different donors were tested, with similar results.



**Appendix Figure 2.** Healing of scratch wounds in confluent cultures of HOK treated with epinephrine. Scratch wounds were made in confluent cultures of HOK, previously treated with Mitomycin C, as described in MATERIALS & METHODS. Two scratches were made in each well, and 2 fields of view were photographed *per* scratch by means of an inverted Nikon Diaphot microscope. Images of the same field were captured at 0 (**a,b,c**) and 24 (**d,e,f**) hrs after the scratches were made. After wounding, the medium was replaced with growth medium alone (Control), (a,d) 1  $\mu$ M epinephrine (b,e), or 20  $\mu$ M timolol + 1  $\mu$ M epinephrine (c,f). We used ImageJ (NIH.gov) to measure the scratch wound area, and performed a heteroscedastic (two-sample unequal variance), one-tailed Student's *t* test to compare the average percentage healing. Bar = 50  $\mu$ M. The quantitative analyses of these assays are displayed in graph form in Fig. 2C of the text.