Surface Chemical Gradient Affects the Differentiation of Human Adipose-Derived Stem Cells via ERK1/2 Signaling Pathway

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Methods

The optical density of the stained images was quantified using ImageJ2x software. For OPN staining images, all the images were converted into 8-bit black/white images and then inverted. The optical density value was defined with gray level 255 (white) as a value of 0 and gray level 0 (black) as a value of 2.708. In this way, the mean optical density value of the edited images is proportional to the fluorescence intensity of corresponding original images.

For p-ERK and ALP staining images, all the images were converted into 8-bit black/white images. The optical density value was defined with gray level 255 (white) as a value of 0 and gray level 0 (black) as a value of 2.708. In this way, the mean optical density value of the edited images is proportional to the expression level of p-ERK or ALP.
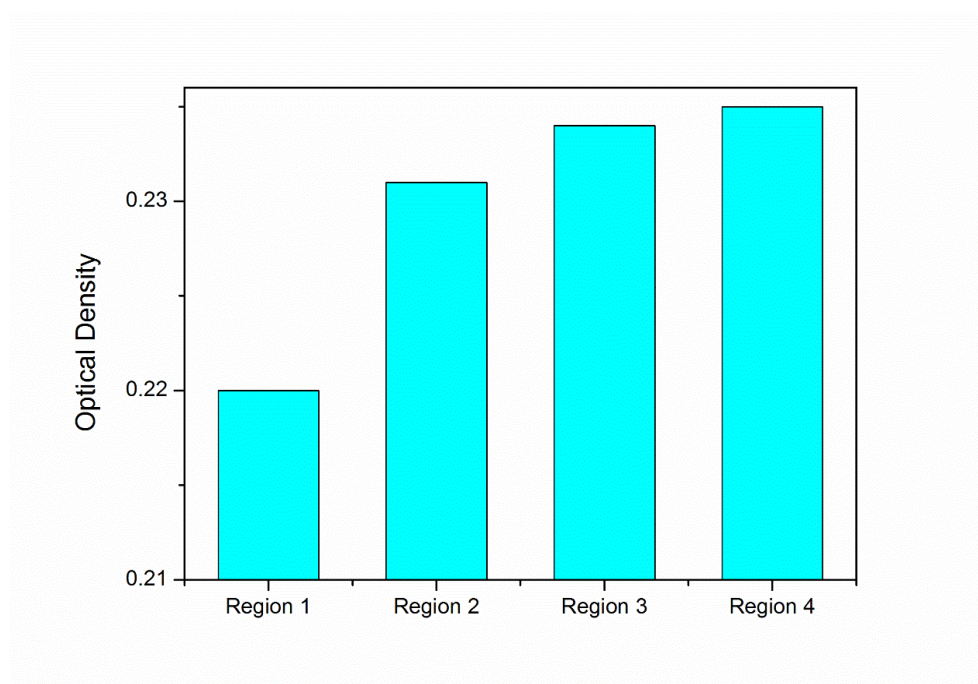
Supporting Figures

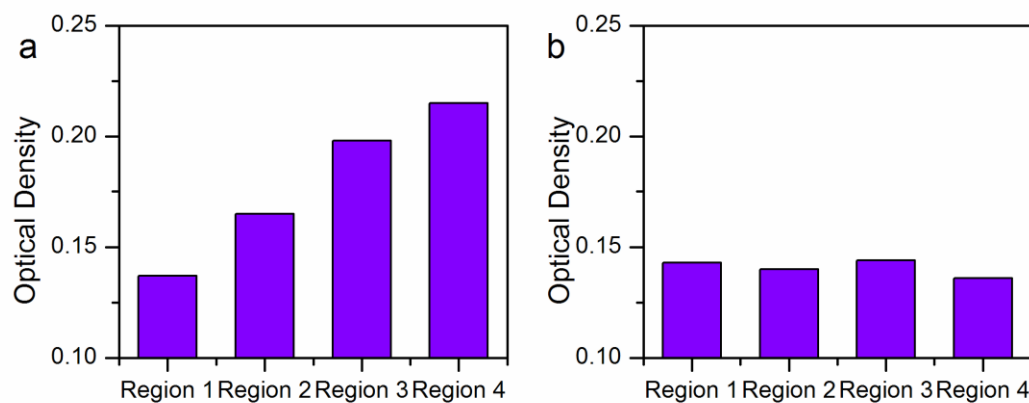Figure S1. The calculated optical intensity of the p-ERK staining.

Figure S2. The calculated optical intensity of the ALP staining (a: without PD98059, b: with PD98059).
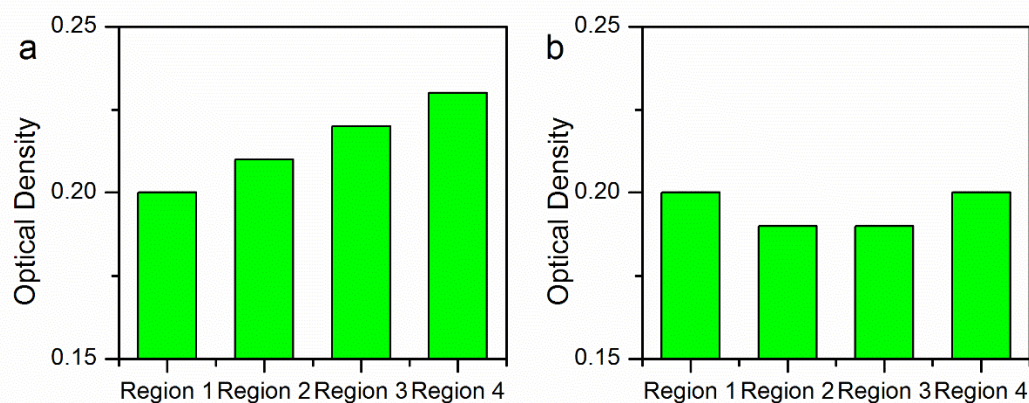

Figure S3. The calculated optical intensity of the OPN staining (a: without PD98059, b: with PD98059).