



Fluorescent images showing organization of actin cytoskeleton (green) and glucose transporters, GLUTs, 1 and 4 (red) of human epithelial cells cultured on the surfaces with 0% (upper images) and 100% D-glucose (lower images) display.

The cells on the 100% D-glucose-displayed surface exhibited a stretched shape with a nebulous distribution of GLUTs1 and 4 expressions (lower, left and right images, respectively) in the entire cell body including the tip of the filopodia, whereas the cell on the 0% D-glucose-displayed surface showed extensive GLUT4 spots only on the cell body (upper, right image). It can be stated that the morphological changes of epithelial cells mainly depends on GLUT mediation on the D-glucose-displayed surfaces.

Related article: Kim, M.-H., Kino-oka, M., Kawase, M., Yagi, K., and Taya, M., "**Glucose transporter mediation responsible for morphological changes of human epithelial cells on glucose-displayed surfaces**", **J. Biosci. Bioeng.**, vol. 105, 319-326 (2008).