

## Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: Ultrastructural 3D-model of a Melanocyte-Keratinocyte interface at a human skin epidermis by electron tomography; melanocytes plasma membrane (green), keratinocytes plasma membrane (blue), pigmented melanosomes (red), melanin pigment (black) and caveolae (white) in single and clustered structures. See also **Fig. 1f** and **Supplementary Fig. 1f**.

File Name: Supplementary Movie 2

Description: Time-lapse microscopy of siCtrl-treated melanocytes co-cultured with keratinocytes used to draw the cell boundaries (see also **Fig. 3d**, top). Trans-illumination. Acquisition parameter: 200 ms exposure. Video is shown at 7 frames/second. Bar, 20  $\mu\text{m}$ .

File Name: Supplementary Movie 3

Description: Time-lapse microscopy of siCav1-treated melanocytes co-cultured with keratinocytes used to draw cell boundaries (see also **Fig. 3d**, bottom). Trans-illumination. Acquisition parameter: 200 ms exposure. Video is shown at 7 frames/second. Bar, 20  $\mu\text{m}$ .

File Name: Supplementary Movie 4

Description: Time-lapse microscopy of siCtrl-treated melanocytes (contoured in yellow, left) co-cultured with keratinocytes (contoured in green, left). See also **Fig. 3e**. Trans-illumination. Acquisition parameter: 200 ms exposure. Video is shown at 7 frames/second. Bar, 25  $\mu\text{m}$ .

File Name: Supplementary Movie 5

Description: Time-lapse microscopy of siCav1-treated melanocytes (contoured in yellow) co-cultured with keratinocytes (contoured in green). See also **Fig. 3e**. Trans-illumination. Acquisition parameter: 200 ms exposure. Video is shown at 7 frames/second. Bar, 25  $\mu\text{m}$ .

File Name: Supplementary Movie 6

Description: Time-lapse microscopy of the burst assay for siCtrl melanocytes. See also **Fig. 3h**. Acquisition parameters: 80-150 ms. Video is shown at 7 frames/second. Bar, 50  $\mu\text{m}$ .

File Name: Supplementary Movie 7

Description: Time-lapse microscopy of the burst assay for siCav1 melanocytes. See also **Fig. 3h**. Acquisition parameters: 80-150 ms. Video is shown at 7 frames/second. Bar, 50  $\mu\text{m}$ .

File Name: Supplementary Code 1

Description: README file detailing the procedure to use the two codes developed in the study. The codes are provided as .ijm files that can be opened using the ImageJ software.

