## **Description of Additional Supplementary Files**

File Name: Supplementary Movie 1

Description: E-cadherin-YFP-labeled cell-cell border of NHEKs expressing mCherry before

and after laser ablation.

File Name: Supplementary Movie 2

Description: E-cadherin-YFP-labeled cell-cell border of NHEKs expressing Dsg1-FL before and

after laser ablation.

File Name: Supplementary Movie 3

Description: E-cadherin-YFP-labeled cell-cell border of NHEKs expressing Dsg1-909 before

and after laser ablation.

File Name: Supplementary Movie 4

Description: Behaviour of MDCK cells expressing GFP (green); >12 hours of recording.

File Name: Supplementary Movie 5

Description: Behavior of MDCK cells expressing Dsg1-GFP (green); >12 hours of recording.