Supplemental data

Movies 1-3: Apico-basal localization of Notch and Dl in SOPs (pI) and its daughter cells.
Dl (red), NICD (Green) and Spdo (blue) distribution in pI in interphase (movie 1), pI during prometaphase (movie 2), and pIIb/pIIa (movie 3). pI and daughter cells were identified using Spdo (Blue). Each movie corresponds to an apical-to-basal confocal section series. The z-interval between two sections is 0,7 μm.

Figure S1: Localization of Dl, Par-6 and E-Cad
(A-D') Dl was detected at the apical level of epidermal cells as well as of pI (A, A") and pIIb/pIIa (C,C"). Dl colocalized with E-Cad (blue) or Par-6 (green) chosen as an apical marker. In basal sections (B, B"), Dl localized into intracellular structures and at the plasma membrane of pI cells. (C-D") In the pIIb cell, Dl localized in intracellular structures previously identified as endocytic structures (Le Borgne and Schweisguth, 2003), whereas Dl was also detected on the basolateral cortex in the pIIa cell (D, D"). E-Cad (blue) distribution was not restricted to the apically localized adherens junctions as E-Cad also co-distributed with Dl on the basolateral membrane albeit at a low level (B''', D'''). Bar is 5 μm in (A-D''').
E-E": Cell surface staining of Dl. Dissected nota were incubated with anti-Dl antibody at 4°C for 15 min. Dl localized at the basal lateral cortex of the pIIa cell and at the pIIa/pIIb interface. SOPs were identified using Spdo (green in E,E') Anterior is left. Bar is 2,5 μm in (E-E").

Figure S2: Dl accumulates at the basal plasma membrane of cells mutant for *lqf* or *shi^{ts}*
Localization of Dl in *lqf^{L71}* (A-E') and *shi^{ts}* (G-G") mutant versus control (D-F'') cells . (A) low magnification view showing a *lqf^{L71}* mutant clone marked by the loss of nuclear GFP (green). SOPs were identified using Spdo (blue). (B) *lqf^{L71}* mutant adult phenotype. (C-C") are high magnification views of the region boxed in (A). Dl (red in C,C') accumulated at the basolateral cortex of both epidermal cells and sensory organ mutant for *lqf*. For comparison a control organ of the same specimen is shown in D-D". Dl (red in G,G',H and H') was also detected at the basal lateral membrane of SOPs and of epidermal cells mutant for *shi^{ts}* albeit at lower levels than in *lqf^{L71}* mutant cells (compare panels C' and G'). Loss of *lqf* activity resulted in an increase in the density of sensory organ cells detected by Spdo (blue in A, C

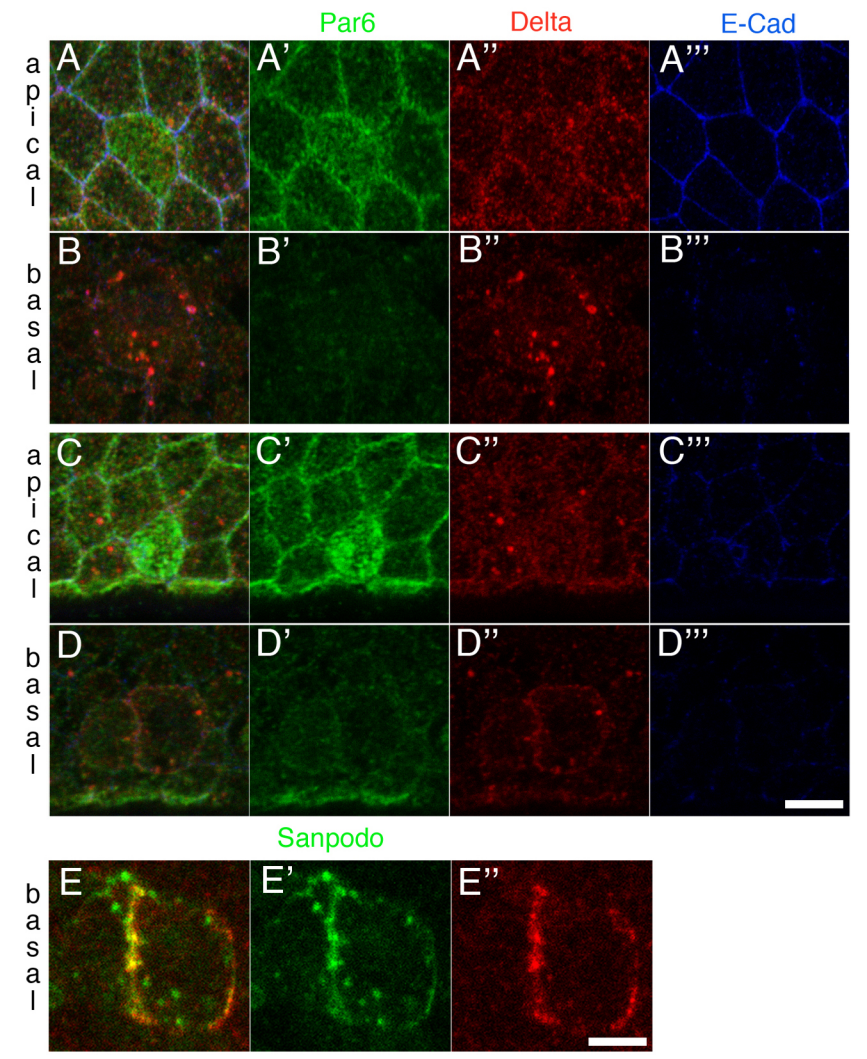
and C") and of adult bristles (B). Panel E-E', F-F' and H-H" show confocal sections along the Z-axis of images C, D, and G-G" respectively. Panels E and F are orthogonal sections of epidermal cells while panels E' and F' encompasses sensory organs identified by Spdo (blue). Notch remained apical in both lqf^{L71} and shi^{ts} mutant cells (not shown). Anterior is left, bar is 50 μm in A, 5 μm in (C-F'), 10 μm in G-H".

Figure S3: **Localization of Notch, Par6 and DE-Cad**

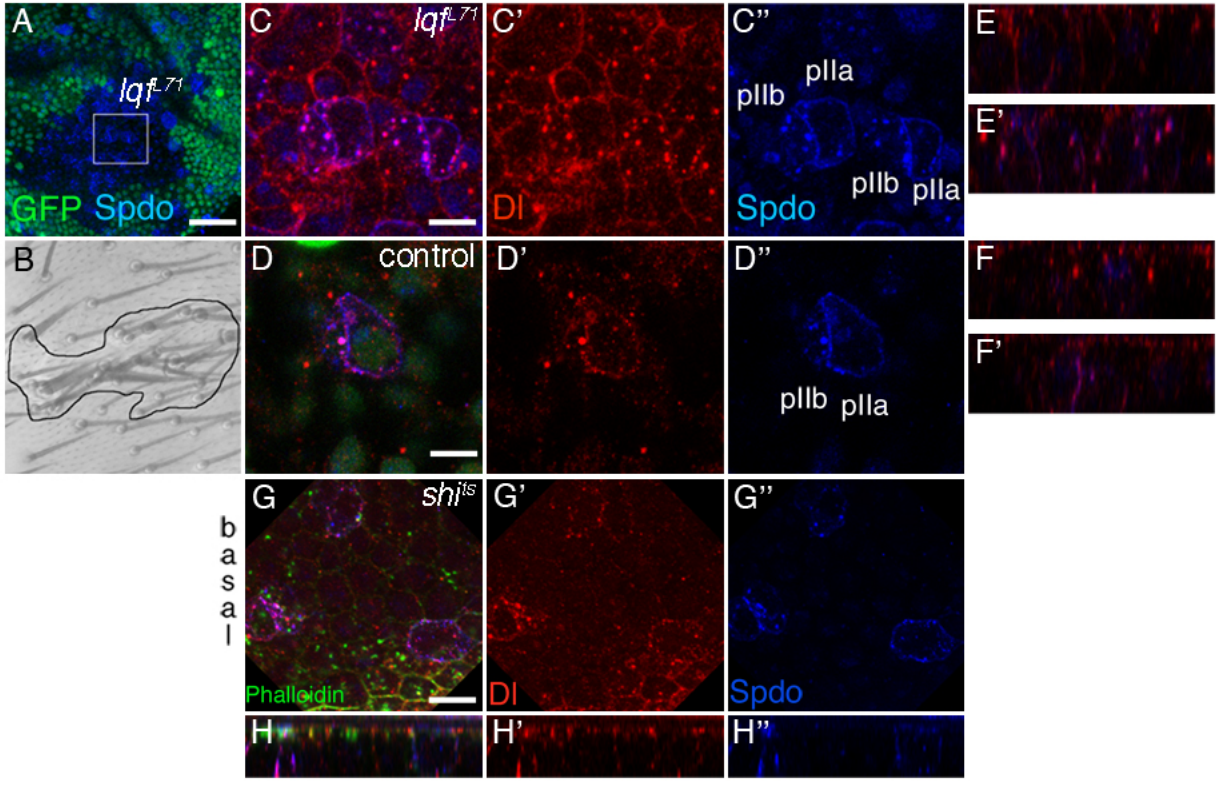
(A-B''') Notch (NECD in green) colocalized apically with Par6 (red) and DE-Cad (blue) and localized basally in intracellular punctate structures. A similar distribution of Notch was observed in pI (A,B''') and pIIb/pIIa cells (C-D'''). We failed to detect Notch at the basal plasma membrane. Sensory cells were identified using Cut (green). A higher level of expression of Par6 was observed in SOPs. Bar is 5 μm in (A-D''').

Figure S4: Dl accumulates at the basal plasma membrane of Tom-expressing cells

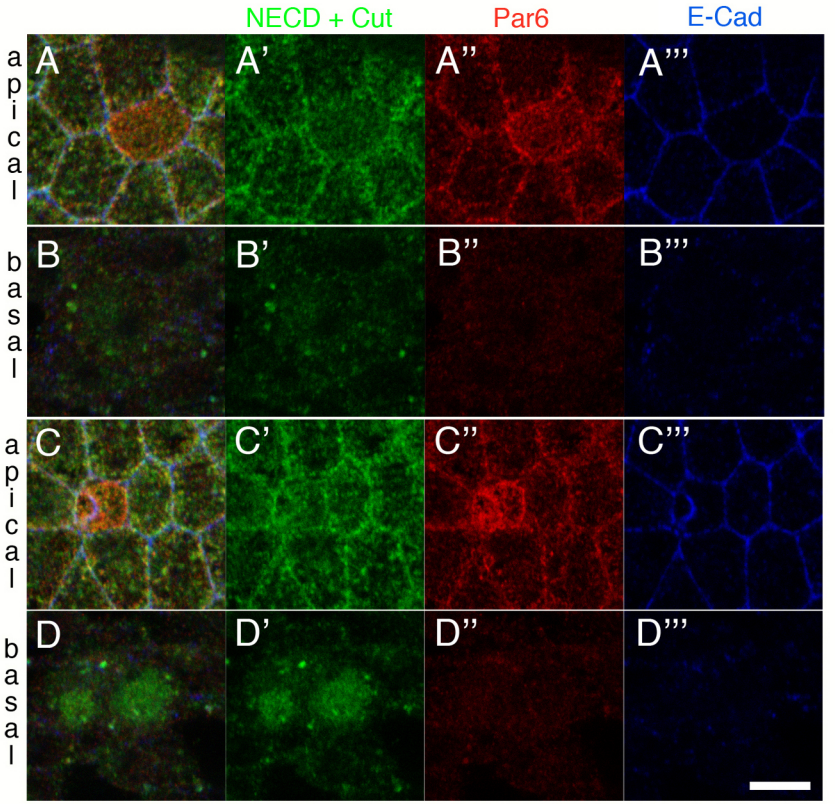
Dl (red in A, B, C, A", B", C") accumulated at the basal-lateral plasma membrane of cells expressing Tom under the control of ap-Gal4. Panels A-A"' show an apical confocal section (E-Cad in blue in A, A"'). SOPs were detected using Spdo (green in A, A', B, B'). Panels B-B"' show a more basal confocal section taken at the level of the nuclei. Panels C-C''' are confocal sections along the z-axis of images A-A"' respectively. Anterior is left. Bar is 10 μm in (A-C"').



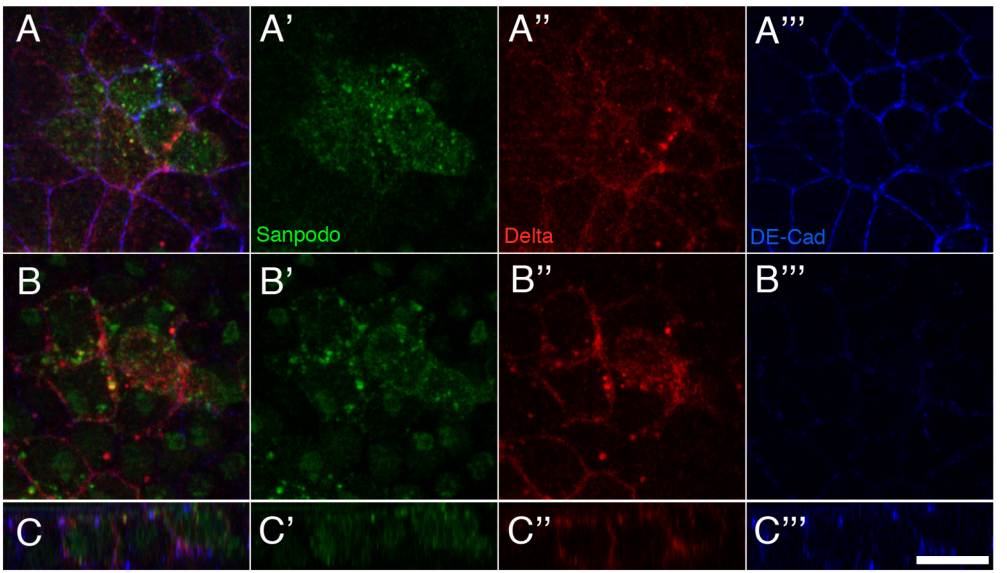
Benhra et al, Fig. S1



Benhra et al, Fig. S2



Benhra et al, Fig. S3



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