

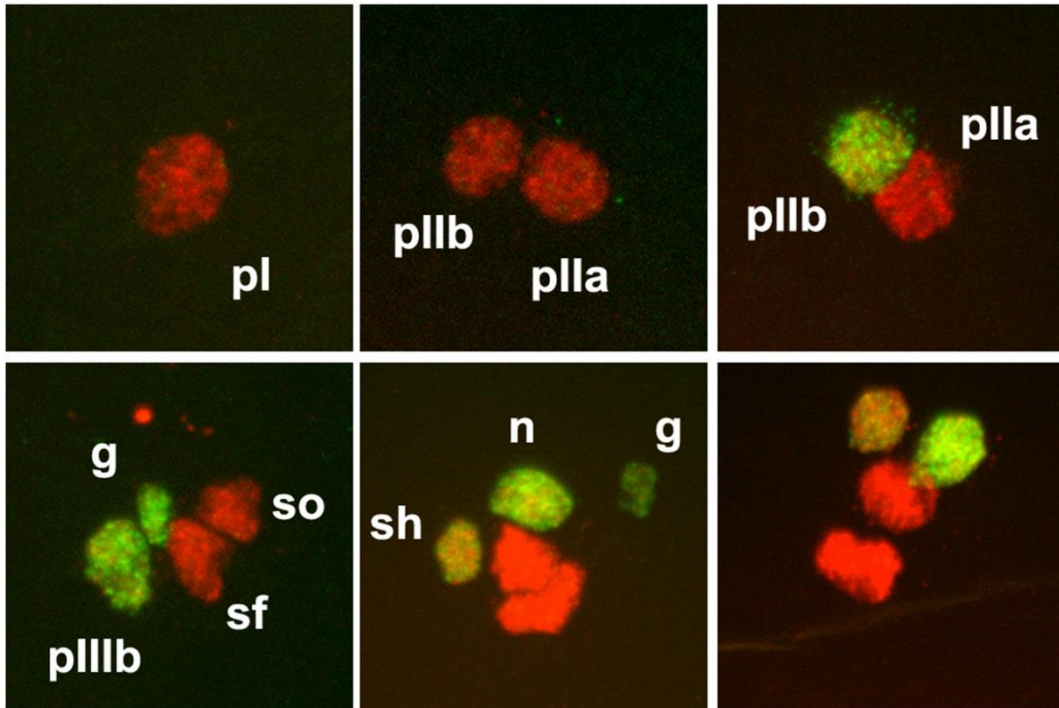
## Supplementary Materials and Methods

### Primary Antibodies:

Mouse anti-Cut (DSHB, #2B10, 1:500); rat anti-ELAV (1:10, DSHB, #7E8A10); rat anti-Esg (1:500, gift from S. Hayashi, Riken Center for Developmental Biology, Kobe, Japan); rabbit anti- $\beta$ -Galactosidase (1:500, Cappel, #55976); rabbit anti-GFP (1:1000, Santa Cruz Biotechnology, #sc-8334); rat-anti-Sens (1:1000, gift of Y. Bellaiche, Institute Curie, Paris, France); mouse anti-Pros (1:5, gift from C. Doe, Institute of Neuroscience, Eugene, USA); rabbit anti-Ttk (1:300, gift from F. Schweisguth, Institut Pasteur, Paris, France); rat anti-Su(H) (1:500, gift from F. Schweisguth, Institut Pasteur, Paris, France); rabbit anti-Pdm1 (1:2000, gift from T. Pr at,  cole sup rieure de physique et de chimie industrielles, Paris, France); mouse anti-Snail (1:2500, gift from A. Alberga, Laboratoire de G n tique Mol culaire des Eucaryotes, Strasbourg, France); mouse anti-Worniu (1:1000, gift from Y. Cai, Temasek Lifesciences Laboratory, Singapore, Singapore); mouse anti-NICD (1:100, DSHB, #C17 9C6).

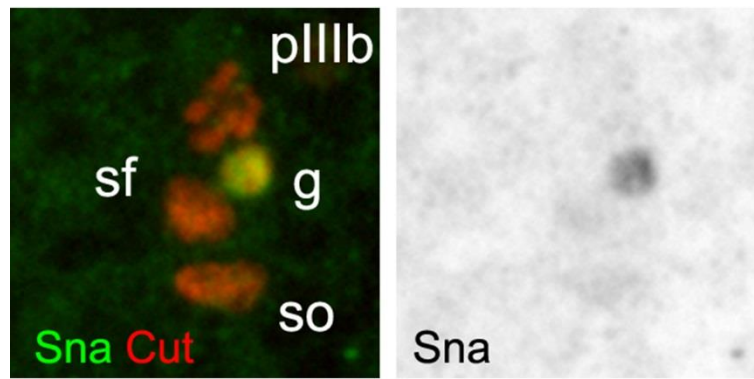
### Secondary Antibodies:

Alexa 488-conjugated secondary anti-mouse (#A11029), anti-rat (#A11006), anti-rabbit (#A11034), anti-guinea pig (#A11073), Alexa 568-conjugated secondary anti-mouse (#A11031), anti-rat (#A11077), anti-rabbit (#A11011), anti-guinea pig (#A11075) were purchased from Molecular Probe and used at 1:1000. Cy5 conjugated antibodies anti-mouse (#715-175-151), -rat (#712-175-153) or -rabbit (#711-175-152) were purchased from Jackson ImmunoResearch and were used at 1:2000.



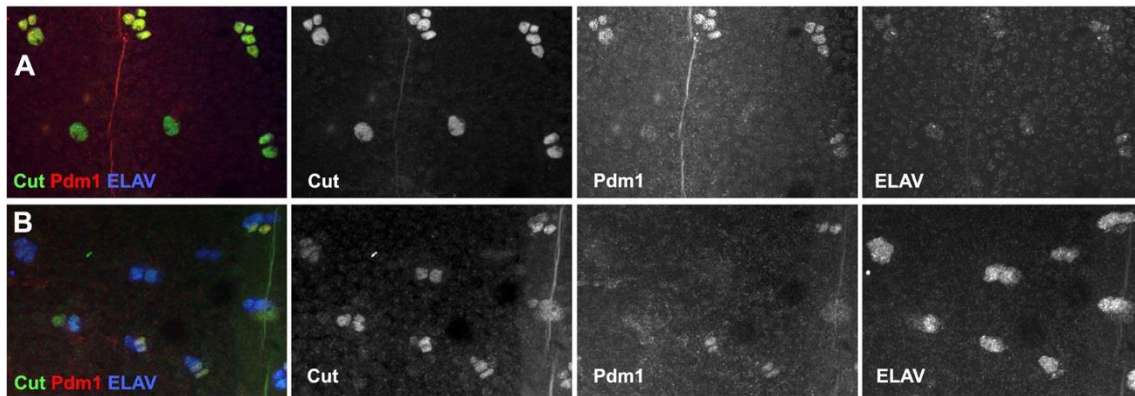
**Figure S1. Scrt is expressed in the neural sublineage of the bristle cells.**

Expression pattern of Scrt inferred from an enhancer trap *scrt-lacZ* fly line (green) at consecutive stages of development. Sensory cells were identified by the expression of Cut-immunoreactivity (red). Probably due to a persistence effect, the  $\beta$ -Gal signal was observed in all pll b descendants, with a particularly high level in neurons.



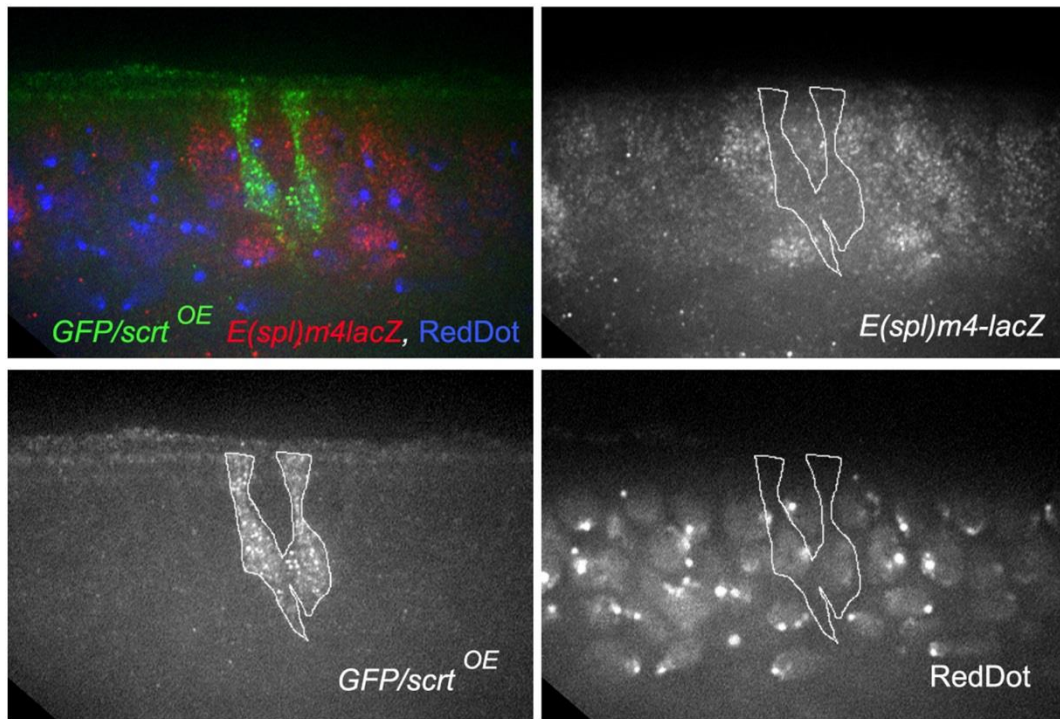
**Figure S2. Snail was expressed in the glial cell.**

mSO cells identified by Cut immunoreactivity (red) stained against Snail. Note that only the glial cell expressed Snail. pIIIb cell was identified since is in division. sf: shaft cell, so: socket cell, g: glial cell.



**Figure S3. Scrt counteracts ligand-independent activation of the N-pathway by overexpression of  $N^{intra}$ .**

(A)  $N^{intra}$  overexpression induced mSO formed exclusively by Pdm1 positive external cells (C'). (B) mSO composed exclusively of ELAV-positive inner cells were observed when  $N^{intra}$  together with Scrt were overexpressed (B''). Pupae at 22h APF.  $N^{intra}$  and *esg* overexpression were induced at 15h APF by shifting to 30°C using the conditional driver *pnr>Gal4 Tub-Gal80<sup>ts</sup>*. mSO cells identified by cut immunoreactivity (red).



**Figure S4. Scrt downregulates transcription activity of *E(spl)m4* promoter *in vivo*.**

Flip-out Scrt overexpression in an intralineage clone in the wing margin. *HS-FLP; tubuline::FRT-STOP-FRT GAL4, UAS-GFP/UAS-scr<sup>OE</sup>; E(spl)m4-lacZ* fly line heat-shocked at 11h and 12h APF and fixed at 24h APF. mSO expressing *E(spl)m4-lacZ* (red) in which an intralineage *scrt*-overexpression clone (identified by GFP, green) has been induced. Note that  $\beta$ -Gal expression disappears in clonal cells. All nuclei were marked by RedDot<sup>TM</sup>. The image corresponds to one confocal plane.



**Movie 1.**

*In vivo* observation of mSO of a protein-trap *esg::GFP; neur-Gal4/UAS-RFP* pupae. The posterior is towards the right and the view is dorsal.