

Fig. S1. In *Abdominal-B* mutants the Eagle pattern is affected in a dose-dependent manner. Flat preparation (maximum projection) of a St13 *Abd-B^{D18}* heterozygous mutant embryo, stained against Eg and En. PSs are depicted on the right and their borders are illustrated by a solid line. The typical medial location of the NB7-3 cluster (Eg and En positive) is marked by yellow arrowheads. Ectopic NB7-3 cells, which do not exist in wild type, are surrounded by broken lines and indicated by white arrowheads. Neuronal NB6-4 progeny, which is never observed in wild-type abdomen, is marked by white arrows. This heterozygous embryo reveals an ectopic neuronal NB6-4 cluster (PS14) and NB7-3 cells (PS15) in only one hemineuromere. ML, midline.

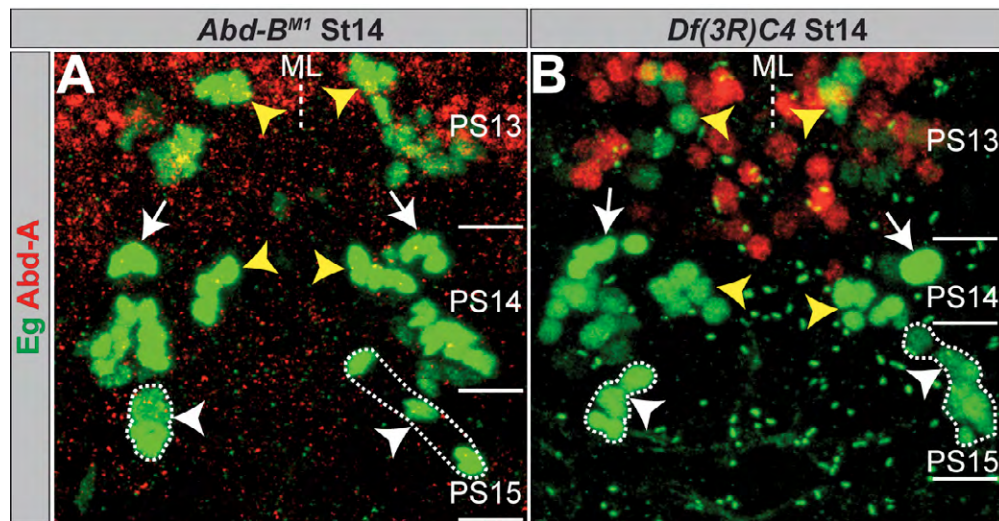


Fig. S2. Abdominal-A expression in *Abdominal-B* mutants. (A,B) Flat preparations (maximum projections) of St14 embryos of the indicated genotype double-stained against Eg and Abd-A. PSs are depicted on the right and their borders are illustrated by a solid line. The wild-type NB7-3 clusters are marked by yellow arrowheads; ectopic ones are surrounded by broken lines and highlighted by white arrowheads. Ectopic neuronal NB6-4 clusters are depicted by white arrows. ML, midline.

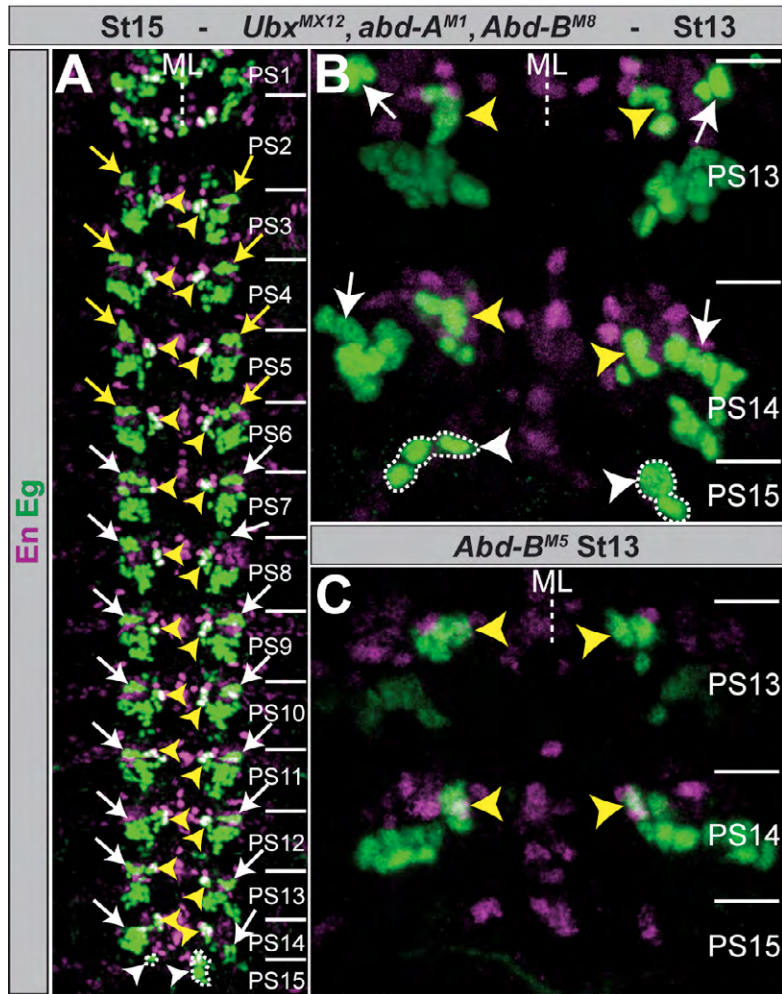


Fig. S3. Eagle expression in *Bithorax* triple mutants and in *Abd-B^{M5}*. (A-C) Flat preparations (maximum projections) of St13 or St15 embryos of the indicated genotype double-stained against Eg and En. PSs are depicted on the right and their borders are illustrated by a solid line. The wild-type NB7-3 clones are marked by yellow arrowheads. (A,B) Wild-type NB6-4 neuronal subclones are depicted by yellow arrows. Ectopic NB6-4 neuronal subclones in the abdomen are highlighted by white arrows. Ectopic NB7-3 cells in PS15 are surrounded by dashed lines and marked by white arrowheads. (A) Please note the occurrence of NB6-4 neuronal subclones in every PS, which reflects the transformation to ground state (T2=pPS4 + aPS5). ML, midline.

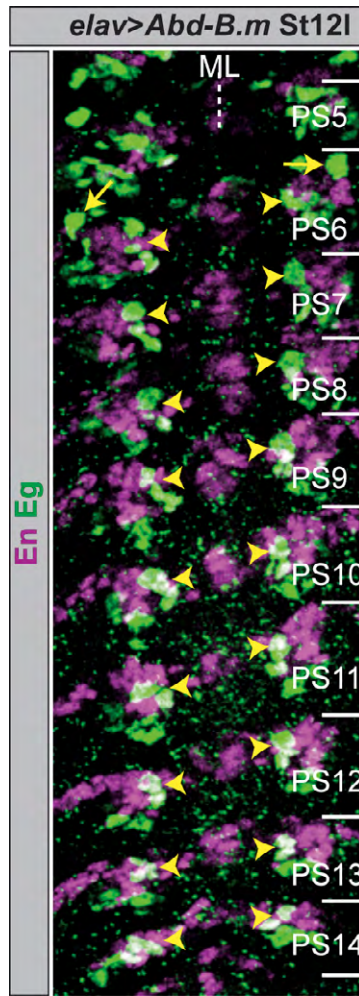


Fig. S4. Late ectopic *Abdominal-B.m* expression. Flat preparation (maximum projection) of a St12l embryo, stained against Eg and En. *elav*-Gal4 driven *Abd-B.m* does not remove the NB7-3 cells in thorax or abdomen. PSs are depicted on the right and their borders are illustrated by a solid line. NB7-3 cells are marked by yellow arrowheads. Neuronal NB6-4 clusters in the thorax are highlighted by yellow arrows. ML, midline

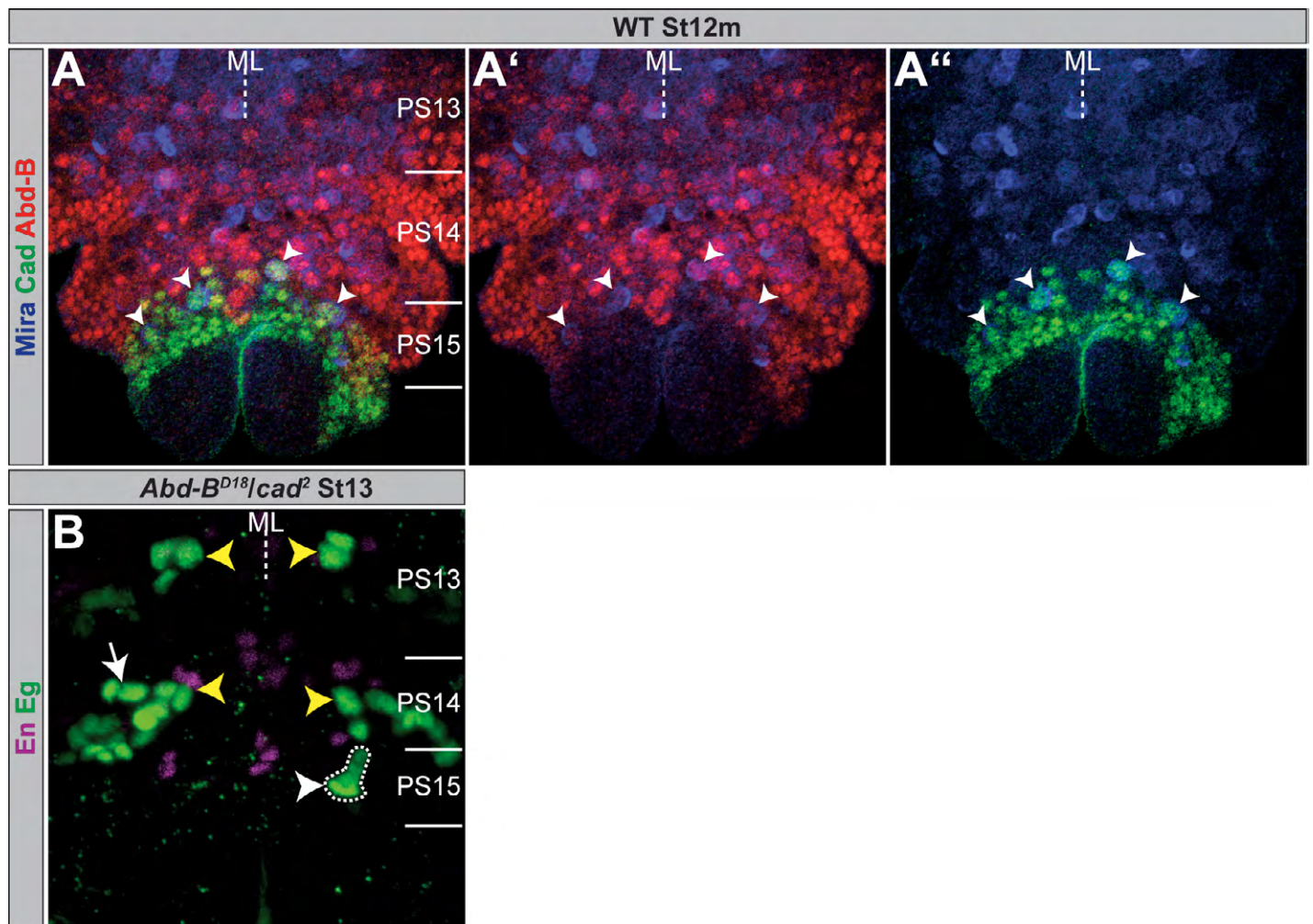


Fig. S5. Caudal expression in terminal neuroblasts and Eagle expression in a *caudal²/Abdominal-B^{D18}* transheterozygous situation. Flat preparations (maximum projections) of St12m and St13 of the indicated genotype, double- or triple-stained as illustrated. PSs are depicted on the right and their borders are illustrated by a solid line. (**A-A''**) Arrowheads mark NBs, identified by the expression of Miranda (Mira) (Ikeshima-Kataoka et al., 1997; Shen et al., 1997), their location and their size. They co-express Abd-B.r and Cad. (**A'**) Mira and Abd-B; (**A''**) Mira and Cad. (**B**) Yellow arrowheads depict regular NB7-3 cells. The ectopic one in PS15 is marked by a white arrowhead and surrounded by a dashed line. The white arrow points to an ectopic neuronal NB6-4 cluster in PS14. ML, midline; WT, wild type.

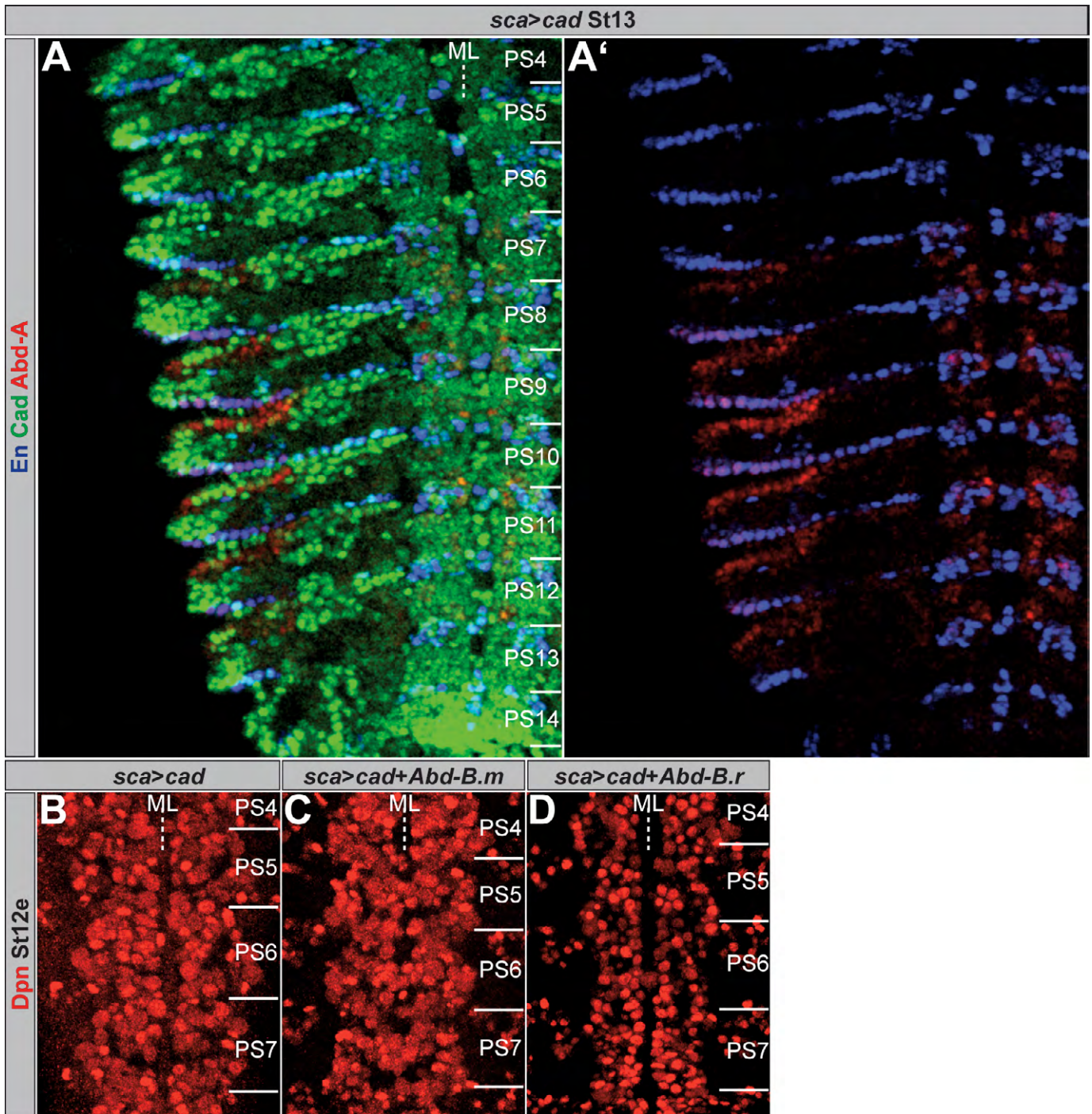


Fig. S6. Ectopic expression of *caudal* results in a downregulation of Abdominal-A and inhibition of neuroblast formation. Flat preparations (maximum projections) of St12e or St13 embryos of the indicated genotype, stained as illustrated. PSs are depicted on the right and their borders are illustrated by a solid line. (A) Repression of Abd-A expression by ectopic *cad*; (A') the blue and red channel. (B-D) Inhibition of NB formation by ectopic *cad* (B) is significantly enhanced by ectopic co-expression of *Abd-B.m* (C) or *Abd-B.r* (D). ML, midline.