

### Mediolateral position of dividing cells in the neural keel

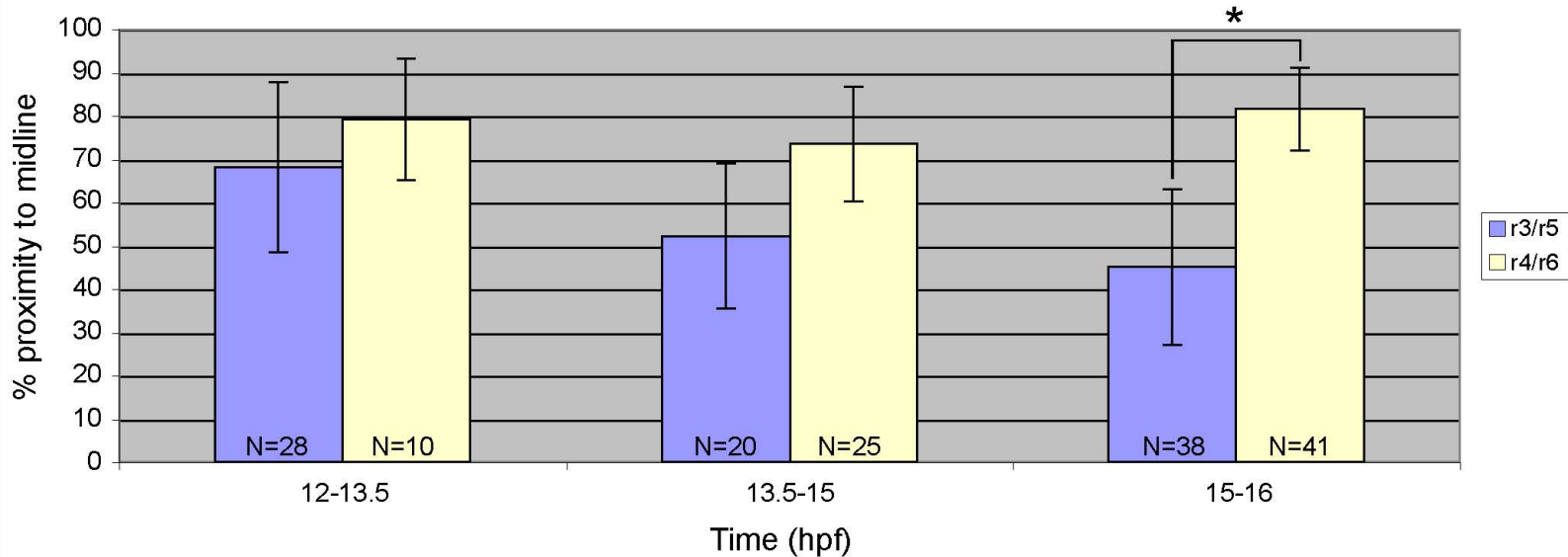


Fig S7: Dividing cells in r3 and r5 of an EphA4 MO mosaic become laterally displaced in the late neural keel.

The mediolateral position of the nuclei of dividing WT cells transplanted into an EphA4 MO host was scored throughout the neural keel/rod stage. Proximity of dividing nuclei to the midline in r3 and r5 as compared to r4 and r6 is shown at progressive neural keel stages. In the early neural keel (12-13.5hpf), most cell divisions are closer to the midline than to the lateral edge of the neuroepithelium. While the average position of dividing cells in r4 and r6 remains medial throughout the neural keel stage, there is a gradual lateral displacement of dividing cells in r3 and r5 so that between 15 and 16hpf, most cell divisions in r3 and r5 are statistically significantly closer to the lateral surface (\* =  $2.1 \times 10^{-17}$ ). Proximity is expressed as a percentage of the distance to the midline, where 100% defines a position at the midline and 0% represents a position at the lateral edge of the neuroepithelium. Number of cell divisions scored in each time interval is indicated.