Supplementary Figure 4

R axon projections are regulated independently of the dorsoventral patterning of the retinae
**iro** expression is examined using anti-Ara antibody that recognizes Ara and Caup (magenta). Ommatidial chirality is visualized by labeling R1/6 cells using anti-BarH1 antibody (green). Ser expression is examined using anti-Ser antibody (white). Photoreceptor cells and Bolwig’s nerves are visualized by mAb24B10 (blue). Only BarH1 expression is shown. (a) In wild-type, **iro** expression is found in the dorsal retina anterior to the furrow (arrow), and ommatidia have distinct chiralities in the dorsal and ventral retina. (b) In **DWnt4**P23, **iro** expression and ommatidial chirality are normal (same results were obtained in **DWnt4**C1/EMS23). The retina taken from the retina-brain complex showing the misrouting phenotype is shown. (c) In **Dfz2**C1/Df(3L)Dfz2, **iro** expression and ommatidial chirality are normal. (d) In **dsh**VA153, **iro** expression is eliminated in the retina (arrow), and ommatidial chirality is disorganized. The equator is not identifiable. (e,f) Ventral specific Ser expression in early third instar retinas is indistinguishable in wild-type and **dsh** backgrounds (arrows). (g,h) **iro** expression and ommatidial chirality are normal in **hep**75 hemizygotes in combination with **DWnt4**EMS23+ and **Dfz2**C1+, Same results were obtained in retinas taken from the retina-brain complex showing the ‘ventral-to-dorsal’ phenotype. Scale bars are 50 m (a, b, c, g, h), 42 µm (d) and 23 µm (e,f).