



Figure S1 Two interacting DrosDel deficiencies identified in the initial screen covered two known factors, *ds* and *DI*, acting in parallel to or downstream of the Fz/PCP signaling pathway. Graphs show average rotation and chirality defects as determined by the *Rh1-GFP* assay for indicated genotypes for both *sev-Gal4, UAS-dgo* (G) and *sev-Gal4, UAS-pk* (G2). (A) *Df(2R)ED62*, subdividing deficiencies *Df(2R)ED49* and *Df(2R)Exel8003* enhanced rotation defects of *sev-Gal4, UAS-dgo* significantly ($*=P<0.03$). *Notchless* (*Nle*) might be the candidate gene responsible for that interaction. Subdividing deficiencies *Df(2R)ED49*, *Df(2R)ED94* and *ds^{UA071}* enhanced chirality defects of *sev-Gal4, UAS-dgo* significantly ($**=P<0.02$), confirming the initial chirality interaction ($***=P<0.1$) and identifying *dachsous* (*ds*) as the gene responsible for it. No effects were seen with *sev-Gal4, UAS-pk*. *Df(2R)ED94* enhanced rotation defects of *sev-Gal4, UAS-pk*. (B) *Df(3R)ED5942*, subdividing deficiencies *Df(3R)Cha9* and *DI^{RF}* enhanced rotation defects of *sev-Gal4, UAS-dgo* significantly ($*=P<0.1$), confirming the initial interaction and identifying *Delta* (*DI*) as the gene responsible for it. Deficiency *Df(3R)Cha9* also enhanced chirality defects of *sev-Gal4, UAS-dgo*. 4 eyes were analyzed each and 90-150 ommatidia were evaluated per genotype.