



**Figure S1** Drosophila PDZ-domain-containing proteins are functionally diverse and involved in numerous processes. (A-B) Of the 66 genes annotated to contain a PDZ domain, 51 were analyzed by PANTHER (<http://www.pantherdb.org>). (A) PDZ proteins are found in almost half (6/14) of the classifications for molecular function and predominantly annotated as having binding, enzyme regulator, structural, or catalytic activity. Molecular function is defined as the action that a protein performs on its direct target. A protein is assigned only one molecular function. (B) PDZ proteins contribute to 14 out of 19 annotated biological processes. A protein can contribute to multiple processes. (C) Positive hit genes were surveyed for roles in polarity or association with the cytoskeleton using AmiGO (<http://amigo.geneontology.org>). Genes can fall into both categories. The polarity genes include: *baz*, *CASK*, *dsh*, *Lap1*, *par-6*, *Patj*, *pyd*, *sdt* and *veli*. The following genes are associated with the cytoskeleton: *CG14168*, *CG42319*, *CG42788*, *CG5921*, *CG6498*, *dsh*, *Lap1*, *LIMK1*, *Patj*, *Ptpmeg*, *RhoGAP19D*, *Syn2*, *veli*, and *Zasp52*.