

**Figure S2** Dorsal closure in mutants with defective dorsal vessel development. (A-B') St. 17 mutant embryos stained fluorescently (A-A") or colorimetrically (B, B') to view the dorsal vessel and overlying epidermis. (A-B')  $mbc^{D11.2/D11.2}$  mutant embryos to examine dorsal closure and dorsal vessel defects. The majority of embryos (90%) do not exhibit dorsal closure defects as visualized by FasIII (green), but still exhibit defects in dv patterning (Mef2 in red; bracket). (B) Approximately 10% of mbc mutants show dorsal closure defects. If this occurred, the cardioblasts did not migrate to the midline (arrow; compare to the midline pairing of cardioblasts in B'). Embryos that showed dorsal closure defects were not included in our phenotypic or quantitative analysis of dv phenotypes.