



**Figure S2. Morphological measurements of zebrafish.** (1) Morphological measurements of WT and homozygous *fbxl3a* zebrafish embryos. Representative WT and *fbxl3a*<sup>-/-</sup> embryos, progeny of a cross between heterozygous (*fbxl3a*<sup>+/-</sup>) fish, at the beginning of the pharyngula period (24 hpf) and its end (48 hpf) are shown. The scale bar indicates 200  $\mu$ m. No evidence for structural abnormalities was detected. (2) At the age of 10 weeks, 22 morphological traits were measured. Lateral view of WT (a) and *fbxl3a*<sup>-/-</sup> (c) fish are presented. Visualization of the skull and pectoral girdle of clear and double-stained WT (b) and *fbxl3a*<sup>-/-</sup> (d) fish. Staining of the bones (pink) and cartilage (blue) allowed visualization of the skeletal structures. Scale stands for 1 mm. (3) Morphometric traits measured to characterize body and viscerocranium dimensions (detailed description of the morphological traits is provided in Table S1). Measurements are superimposed on a line drawing of zebrafish WT in lateral (a-b), ventral (c), and dorsal (d) aspects. No significant evidence for structural abnormalities was detected.