



Supplementary figure. Phylogenetic relationships among chordate Pax2/5/8 proteins, illustrating the independent gene family expansions that permitted parallel histories of subfunction partitioning among vertebrate paralogs (Pax2, Pax5 and Pax8) and among urochordate paralogs (Pax2/5/8a and Pax2/5/8b). Protein alignment and phylogenetic analysis was performed as described in reference [38]. Vertebrates: Dre, *Danio rerio*; Hsa, *Homo sapiens*; Cephalochordates: Bfl, *Branchiostoma floridae*; Urochordates: Ascidians: Cin, *Ciona intestinalis*; Csa, *Ciona savignyi*; Hcu, *Herdmania curvata*; Hro, *Halocynthia roretzi*; Pma, *Phallusia mammillata*; and Larvaceans: Odi, *Oikopleura dioica* (red); Protostomes: Dme, *Drosophila melanogaster*.