

Supplemental Figure S2. Conserved syntenies and loss of the zebrafish amhr2 gene. A. A portion of chromosome 22 (Ame22) from the cavefish Astyanax mexicanum containing amhr2. B. Three portions of zebrafish chromosome 11 (Dre11) containing regions with conserved synteny to the amhr2-containing portion of the cavefish genome showing that the breakpoint of a chromosome rearrangement lies at the predicted location of amhr2. The portion of the figure above part A shows that paralogons of the zebrafish genome from Dre22 and Dre2 contain ohnologs derived from the teleost genome duplication and also lack amhr2. C. The three regions of the zebrafish genome shown in in part B occupy different positions along the entire chromosome Dre11. D. Portions of the common carp (Cyprinus carpio) genome on two parts of Cca22 with orthology to the amhr2-containing part of cavefish, which are broken at the expected site of the amhr2 gene as in zebrafish. E. Positions of regions shown in part D on chromosome Cca22. F. The duplicated region from the carp genome duplication event co-orthologous to zebrafish chromosome Dre11. G. Positions of regions shown in part F on chromosome Cca22. Results show that amhr2 loss occurred associated with a chromosome rearrangement breakpoint that is a shared feature of cypriniforms that occurred after cypriniform otophysans diverged from characiform and siluriform otophysans.