



B hnf1 consensus seq. 5 ' -GTTAATNATTAAC-3 ' cdh17 promoter (-776 to -739) 5 ' -GCTTTAACAGACGTTAATGTTTTACAGAATTCAAACC-3 '





Supp. Fig. 1. cdh17:eGFP transgenic embryos recapitulate endogenous cdh17 expression and hnf1ba and hnf1bb are expressed in the pronephros A) eGFP fluorescence was observed in all segments of the pronephric tubules from 8-somite stage to 5 dpf of stable cdh17:eGFP transgenic embryos. B) eGFP transcripts were detected in all pronephric tubule segments of cdh17:eGFP transgenic embryos up to 48 hpf, after which eGFP expression was lost in the PCT and PST segments (white arrowhead). C-E) cdh17, hnf1ba, and hnf1bb expression profile from 8-somites to 5 dpf (note hnf1bb expression is not observed in the distal late segment (arrowhead) and is not detected in the pronephros after 48 hpf).

Supp. Fig. 2. An Hnf1 binding motif at position -750 of the *cdh17* promoter is required for *cdh17* expression. A) Different *cdh17* promoter constructs were generated and injected into zebrafish one-cell embryos to see if they re-capitulated endogenous *cdh17* expression in transient transgenic embryos. We isolated a 300 bp fragment between positions -900 and -600 that contained the promoter activity. Deletion of a single Hnf1-binding site at position -750 within this 300 bp fragment severely reduced promoter activity. B) The Hnf1-binding site in the *cdh17* promoter at position -750 strongly matches the Hnf1-binding site consensus sequence.

Supp. Fig. 3. *hnf1ba*^{hi1843/hi1843} **embryos die from edema and** *hnf1ba* **is redundant with** *hnf1bb*. A) *hnf1ba*^{hi1843/hi1843} embryos develop pericardial edema at 48 hpf. This edema becomes more severe and progressives to pronephric edema by 4 dpf. B) *hnf1bb*^{mo} knockdown has no effect on *cdh17* expression.