

## **Supplementary information**

### **Characterizing the role of atrial natriuretic peptide signaling in the development of embryonic ventricular conduction system**

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**Supplementary Table S1: List of primers and corresponding primer sequences for real-time quantitative PCR (RT-qPCR) experiments and expected amplicon sizes:**

<b>Name of the Primer</b>	<b>Primer Sequence (5' to 3')</b>	<b>Expected Amplicon Sizes (bp)</b>
Cx40-F	CAGAGCCTGAAGAAGCCAAC	137
Cx40-R	GACTGTGGAGTGCTTGTGGA	
HCN4-F	CCTCCTGCGCCTCTTGAGGCTTT	119
HCN4-R	TGCCAATGAGGTTACGATGCGT	
GAPDH-F	TCGTCCCGTAGACAAAATGG	132
GAPDH-R	TTGAGGTCAATGAAGGGGTC	

F: Forward or sense primer; R: Reverse or antisense primer

**Supplementary Table S2: List of primers utilized for genotyping and their expected amplicon sizes (bp):**

<b>Name of the primer</b>	<b>Primer Sequence (5' to 3')</b>	<b>Wild type allele</b>	<b>Knock-in/knockout allele</b>
<b>Nkx2.5-S</b>	GCCCTGTCCCTCGGATTTACACC	264	583
<b>Nkx2.5-AS</b>	ACGCACTCACTTTAATGGGAAGAG		
<b>Cre-S</b>	GATGACTCTGGTCAGAGATACCTG		
<b>Rosa 1</b>	AAAGTCGCTCTGAGTTGTTAT	650	320
<b>Rosa 2</b>	GCGAAGAGTTTGTCTCAACC		
<b>Rosa 3</b>	GGAGCGGGAGAAATGGATATG		
<b>Npr1-S</b>	GCATGGTTCAGCTCTAAGA	339	500
<b>Npr1-AS</b>	CTAACCTGTGAACTGTAAGC		
<b>Neo-AS</b>	CCTTCAGTTATCTACATCTGC		
<b>Cx40-S</b>	CTCCAATTAACCTTGTGAGCC	380	450
<b>Cx40-AS</b>	AGGCTGAATGGTATCGCACC		
<b>Neo-AS</b>	CTTGCCGAATATCATGGTGG		

**Supplementary Table S3: List of primary antibodies and corresponding dilutions used for immunostaining experiments.**

<b>Primary Antibody</b>	<b>Dilution</b>	<b>Source/Catalogue #</b>
$\beta$ -galactosidase (Rabbit polyclonal)	1:50	Chappel ICN Catalogue #: 55976
Connexin40 (Cx40) (Rabbit polyclonal)	1:50	Alpha Diagnostics Catalogue #: Cx40-A
HCN4 (Rabbit polyclonal)	1:50	Alamone Laboratories Catalogue #: APC-052
Sarcomeric myosin (MF20) (Mouse monoclonal)	1:50	Developmental Studies Hybridoma Bank, Catalogue #: MF-20