Table S2. Overview of cardiovascular defects observed in serially sectioned E14.5 embryos

Genotype	Great artery connections	VSD	RERSA	Aortic arch defects
$\alpha5^{flox/+}$; $\alpha v^{flox/+}$; *Tie2-Cre*				
1198-10	Normal	Closed	Absent	None
α5/αv-cdHemi	**1/1 normal**	**None**	**None**	**None**
$\alpha5^{flox/-}$; $\alpha v^{flox/-}$; *Tie2-Cre*				
1198-3	Defective	VSD	RERSA	Tiny AAo
1198-4	Defective	VSD	Absent	IAA-C
1198-9	Defective	VSD	RERSA	Very thin AA at AA-C
1199-2	Fragile	VSD	Absent	Thin AA
1261-1	Defective	VSD	RERSA	AAo missing
1261-4	Defective	VSD	RERSA	IAA-C (or B)
α5/αv-cdKO	**5/6 defective** **1/6 fragile**	**6/6**	**4/6**	**Frequent defects**
$\alpha5^{flox/-}$; $\alpha v^{flox/+}$; *Tie2-Cre*				
1198-1	Normal	VSD	Absent	Thin at AA-C region
1198-6	Normal	Small VSD	Absent	Thin AA
1198-8	Defective	VSD	RERSA	Vascular ring (double DA)
1198-11	Normal	VSD	Absent	Long thin AA
1199-1	Normal	VSD	Absent	AA dilated shape
1261-7	Fragile	VSD	Absent	Stenosis of DAo
1261-3	Fragile	VSD	Absent	Thin AA
α5-cKO; αv-cHemi	**1/7 defective** **2/7 fragile** **4/7 normal**	**7/7**	**1/7**	**Occasional defects**
$\alpha5^{flox/+}$; $\alpha v^{flox/-}$; *Tie2-Cre*				
1198-2	Normal	Closed	Absent	Absent
1261-5	Normal	Closed	Absent	Absent
α5-cHemi; αv-cKO	**2/2 normal**	**0/2**	**0/2**	**None**

Embryos are organized by genotype and litter embryo number. Great-artery connections: normal, appears as control; fragile, some parts of vessels look distorted or thin but all the connections are normal; defective, defects in vessel organization. VSD column: VSD, ventricular septation defect; closed, ventricular septation; RERSA, retro-oesophageal right subclavian artery. Aoric arch (AA) column, description of defects: AAo, ascending aorta; (I)AA-B/C, interrupted aortic arch type (see Fig. 3A).