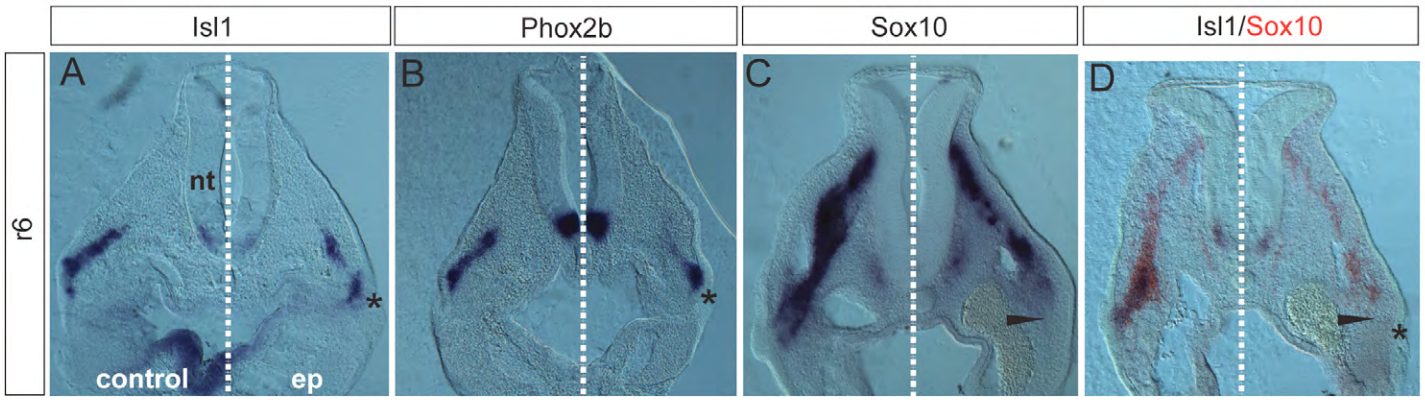
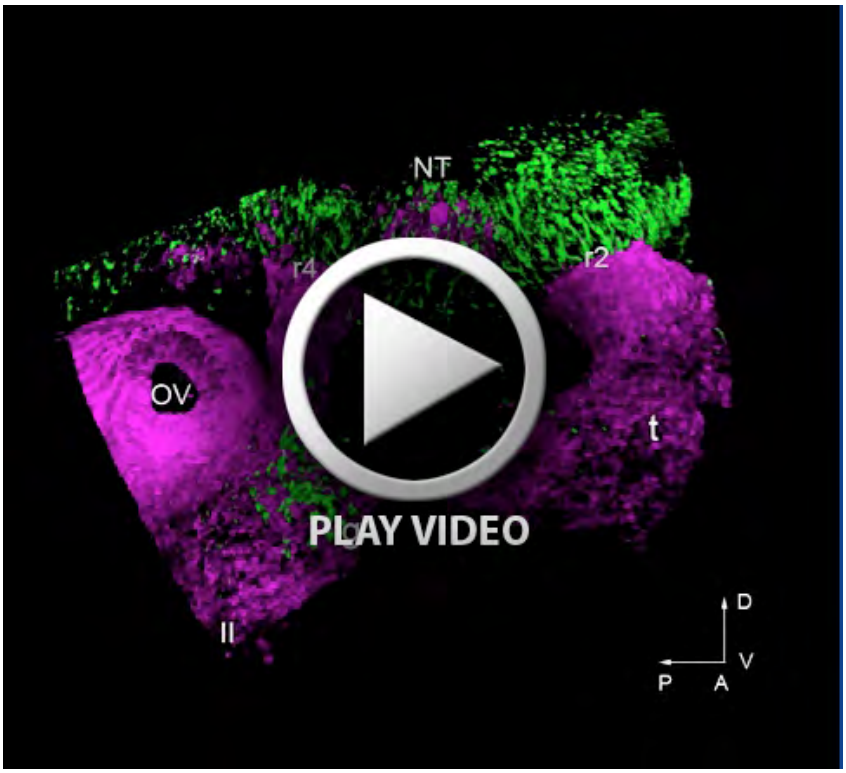
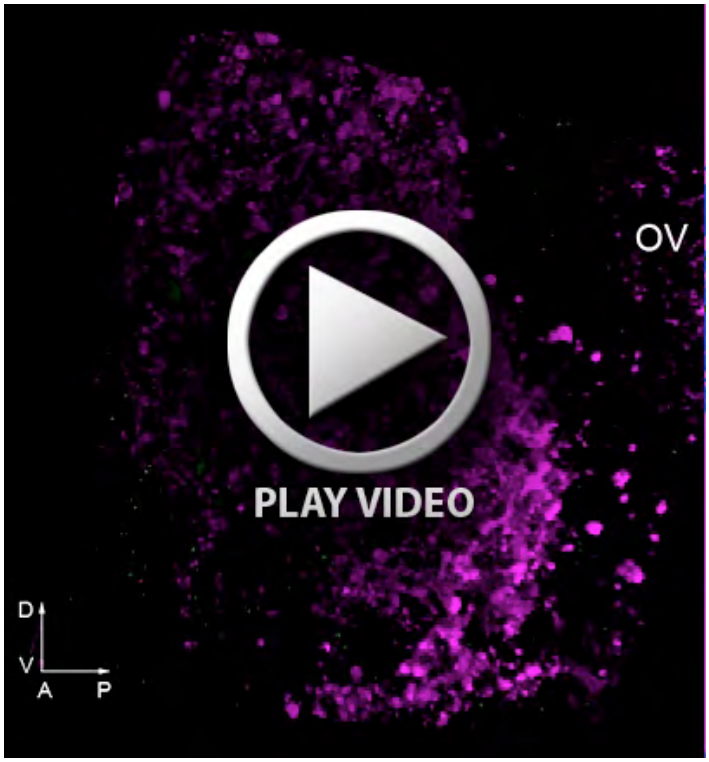


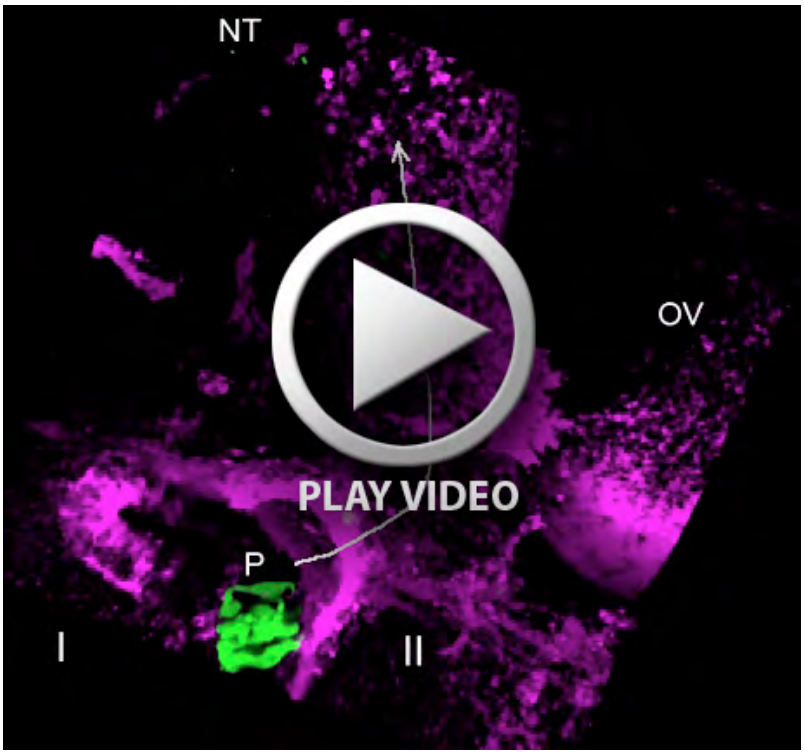
Fig. S1. Ablation of more posterior placode also affects neural crest corridor formation. (**A**,**B**) Sections at r6 level show that there is a reduction in neuroblasts seen with *Isl1* (A) and *Phox2b* (B) from the targeted petrosal placode (asterisks) on ep compared with control sides. (**C**,**D**) Staining for *Sox10* (C) shows an effect on NCC corridor extension (arrowhead) and double staining for *Isl1*/*Sox10* (D) confirms that the reduction in NCC corridor (arrowhead) correlates with loss of neuroblasts (asterisks). nt, neural tube; r, rhombomere; ep, electroporated.



Movie 1. Neural crest cells form a robust structure extending between hindbrain and pharyngeal arches. Three-dimensional reconstruction of confocal *z*-stack through HH17 chicken embryo antibody labelled for HNK1 (neural crest, magenta) and NFM (neurons, green). Imaged region corresponds to R2 and R4 neural crest streams anterior to the otic vesicle. Initial orientation before rotation is equivalent to Fig 1A. NT, neural tube; OV, otic vesicle; r, rhombomere; t and g, developing trigeminal and geniculate ganglia; II, pharyngeal arch 2. Axes indicated: D, dorsal; V, ventral; A, anterior; P, posterior.



Movie 2. Neural crest cells form a corridor associated with neuroblast migration. Three-dimensional reconstruction of a confocal *z*-stack taken through a HH17 chicken embryo showing a GFP-labelled neuroblast migrating within the HNK1^{+} NCC corridor. The region imaged corresponds to the R2 neural crest stream. Initial view shows the exterior of the HNK1^{+} NCC corridor (magenta) then *z*-stack is rotated to show middle of NCC corridor revealing GFP^{+} neuroblast (green). Final rotation shows a coronal angle through the HNK1^{+} NCC corridor. OV, otic vesicle. Axes as before.



Movie 3. HNK1 NCC corridor extends to the placodal epithelium. Three-dimensional reconstruction of a confocal *z*-stack through HH17 chicken embryo showing HNK1^{+} NCC corridor extending to GFP-labelled placode. Imaged region corresponds to R2 neural crest stream. Initial view shows the exterior of HNK1^{+} NCC corridor (magenta) forming a funnel at the placode. Rotation reveals GFP neurons migrating within the NCC corridor. Following rotation back to the initial view, *Sox10 in situ* expression is added to show Sox10^{+} NCC within HNK1^{+} NCC corridor. I and II, pharyngeal arches 1 and 2; NT, location of neural tube; OV, otic vesicle; P, placode; arrow, direction of neuroblast migration.