



**Supplementary Figure 10. IHC and ISH characterization of European eel habenulae.** (A,B,C) show transverse sections of silver eel habenulae following Yo-Pro1 staining (magenta) and IHC with an antibody directed against acetylated tubulin (green). (D) shows a transverse section of silver eel habenula at a posterior organ level following ISH with a *sox1* probe, with a *sox1* signal at the level of neural progenitors (D2) but not the parapineal (D1). (E,F) show adjacent transverse sections of silver eel habenulae at a posterior level following DAPI staining (blue) and IHC with an antibody directed against *pax6* (red). (E,F), (B1,B2,B3,B4), (C1,C2), (D1,D2), (E1,E2) and (F1,F2) are higher magnifications of the areas boxed in (B), (C), (D), (E) and (F) respectively. A vertical line indicates the midline. White arrows point to neural progenitors, a white arrowhead points to the left restricted, *pax6* positive dorsal nucleus. L, left; R, right. Scale bars=200 $\mu$ m.