



**Supplementary Figure 1. Ankk1 immunohistochemistry in adult wild type zebrafish brain.** On the right, ankk1 protein distribution in transverse brain sections. On the left, schematic depiction of zebrafish brain, transversal section (adapted from Wullimann et al.,

1996). (a-f) Positive staining in the forebrain; (g-i) positive staining in the midbrain; (j-l) positive staining in the hindbrain. Scale bars: d, e, 50  $\mu\text{m}$ ; a, b, d', h, 100  $\mu\text{m}$ ; c, e', f, g, i, j, k, l, 200  $\mu\text{m}$ . Abbreviations: III, oculomotor nerve; Cans, commissura ansulata; D, dorsal telencephalic area; Dc, central zone of D; Dd, dorsal zone of D; DIL, diffuse nucleus of the inferior lobe; Dl, lateral zone of D; Dm, medial zone of D; Dp, posterior zone of D; DV, descending trigeminal root; ECL, external cellular layer of olfactory bulb including mitral cells; GC, central griseum; GL, glomerular layer of olfactory bulb; Hd, dorsal hypothalamus; IAF, inner arcuate fibers; IMRF, intermediate reticular formation; ICL, internal cellular layer of olfactory bulb; LLF, lateral longitudinal fascicle; MaON, magnocellular octaval nucleus; PGZ, periventricular gray zone of the optic tectum; PPa, parvocellular preoptic nucleus, anterior part; SO, secondary octaval population; TelV, telencephalic ventricle; TeO, optic tectum; Tl, torus longitudinalis; TLa, torus lateralis; TSc, central nucleus of torus semicircularis; TTb, tractus tectobulbaris; Val, lateral division of valvula cerebelli; Vam, medial division of valvula cerebelli; Vas, vascular lacuna of area postrema; Vd, dorsal nucleus of ventral telencephalic area; Vp, posterior nucleus of ventral telencephalic area; Vv, ventral nucleus of ventral telencephalic area; VIIs, sensory root of the facial nerve.