



Supplementary Figure 2. VEGFR-3 and VEGF-C expression in the embryonic mouse brain.

(a-f) Expression of VEGFR-3 in the embryonic brain. (a-c) Transverse sections through E15.5 diencephalon (Di), eye (e) and optic nerve (*) stained with the indicated antibodies. VEGFR-3 is expressed by lymphatic endothelial cells (arrowheads, a, b) whereas arteries (A), veins (V) and brain capillaries are negative. Note absence of VEGFR-3 labeling of the optic nerve at this stage (b). Arteries and brain capillaries express PECAM (c). Note absence of vessels in the optic nerve (b,c). (d) Schematic representation of expression of VEGFR-3 (orange) and VEGF-C (brown) in the mouse brain at E16.5. Co-expressing areas are yellow surrounded in brown. Amygdaloid and suprachiasmatic areas show VEGFR-3⁺ OPCs (asterisk). OB: olfactory bulb, Cx: cortex, Amy: amygdaloid region, SCA: suprachiasmatic area, Sco: Subcommissural organ, Hyp: Hypothalamic nuclei, bpD: diencephalic basal plate, dTh: dorsal thalamic, vMn: ventral Mesencephalic nuclei, nVII: facial nerve nucleus. (e) RT-PCR with primers for *Pdgfra* and *Vegfr-3* on total RNA of A2B5 cells purified from E18.5 rat optic nerves, and E14 mouse heart. (f) Double-labeling VEGFR-3/Olig2 in the ventral forebrain at E17.5. (g-i) *Vegfr-3* expression by optic nerve astroglial cells. Immunostainings were performed on E17.5 *Vegfr-3*^{-/-} embryos with the indicated antibodies. Labeling for β -gal showed *Vegfr-3*-expressing cells surrounding Tuj1⁺ axons (g). Double labeling for β -gal and PECAM showed exclusion of labeling (h). Double labeling β -gal/Glial shows that Glial⁺ precursors express VEGF-C (yellow) (i). (j) VEGF-A labeling of blood vessel wall. (k) VEGF-D labeling in dental papilla. Scale bar: 300 μ m (b,c); 100 μ m (a,f-h); 80 μ m (i); 40 μ m (j,k).