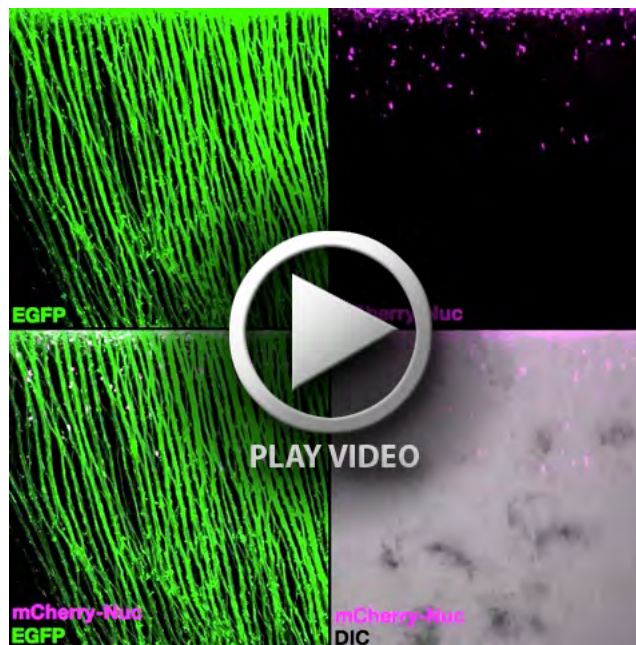


Fig. S1. Soluble NRP1-AP binds to Sema3A

Sema3A protein was detected with soluble NRP1-AP after activation of EGFP and Sema3A by Doxycycline in COS7 cells transfected with pT2K-BI-EGFP/Sema3A, pCAGGS-T2TP and pT2K-CAGGS-rtTA2sM2. NRP1-AP bound to Sema3A-expressing cells that coexpressed EGFP (A, B), but not to mock cells without activation (C, D). Control AP did not bind to Sema3A-expressing cells (E, F).



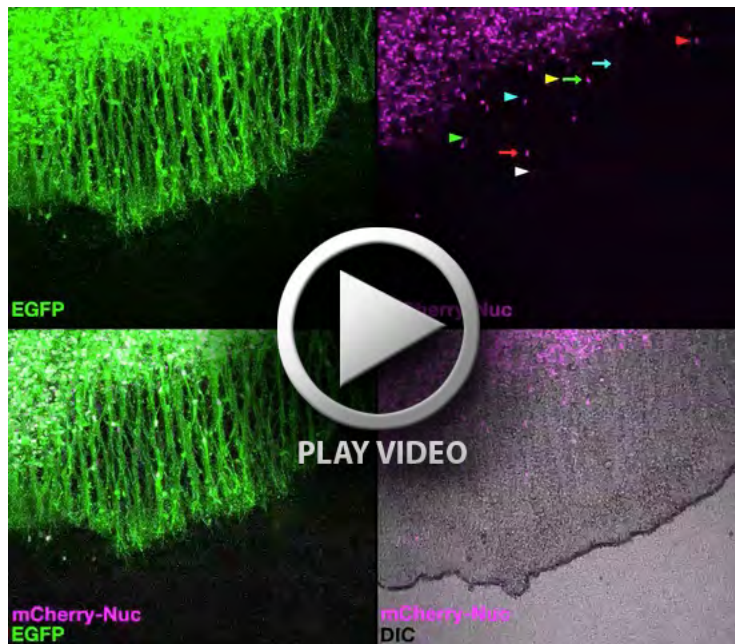
Movie 1. Dorso-ventral movement of the tangentially migrating cells

A z-stack time-lapse movie of 10-minute intervals showing dorsoventral tangential migration in flat-mount culture during 22 hours. Dorsal to the top.



Movie 2. Tangential migration along the tectal efferent axons

A z-stack time-lapse movie of 10-minute intervals showing tangential migration of tectal cells along the efferent axons in flat-mount culture during 24 hours. Dorsal to the top.



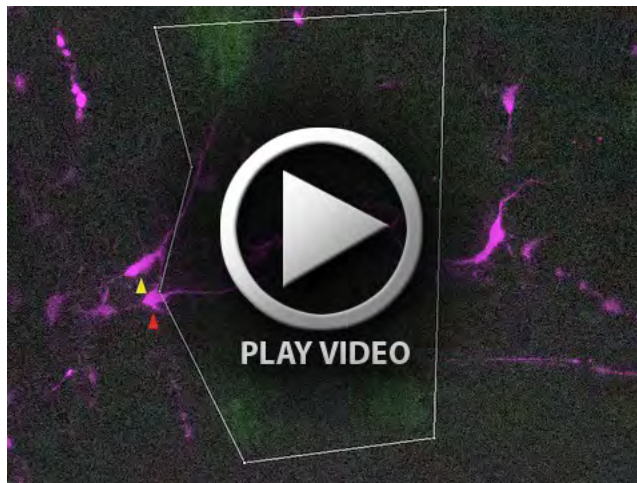
Movie 3. Axophilic tangential migration after removal of distal axons

A z-stack time-lapse movie of 10-minute intervals during 20 hours after cutting the distal end of the tectal efferent axons. The migrating cells stop at the distal tip of the axons and then turn back in the opposite direction (arrowheads) or restart to proceed in the same direction as the following axons elongate (arrows).



Movie 4. Repulsion of the multipolar neurons by Sema3A in tectal slice culture

A z-stack time-lapse movie of 10-minute intervals showing the behavior of the multipolar neurons during the induction of Sema3A in tectal slice culture during 20 hours. mCherry-labeled multipolar neurons (arrowheads) residing within the CFP-positive radial column (noticed by initial weak green signal) are repelled and migrate out from the area of increasing strong green signal (white box) where Sema3A and GFP are induced by Doxycycline during the culture. The multipolar neurons outside of the induction site (arrows) stay at the original positions.



Movie 5. Control tectal slice culture

A z-stack time-lapse movie of 10-minute intervals showing the behavior of the multipolar neurons in control tectal slice culture during 20 hours. mCherry-labeled multipolar neurons residing in the CFP-positive radial column or in its close proximity (arrowheads) are not displaced nor retract their processes from the area of increasing strong green signal (white box) where sole GFP is induced by Doxycycline during the culture.