



Additional file 3. Fig. S3: **a.** GFAP in purified human astrocyte cultures (GFAP, green; DAPI, blue). **b.** Human primary astrocytes were cultured in presence of rSEMA4D or control protein. Antibody blocking effect was determined by incubation with rSEMA4D or control protein (5 ug/ml), in presence/absence of anti-SEMA4D antibody/VX15 or isotype control human IgG4 antibody (25 ug/ml) for 48 hours; each condition was assessed in 6 replicate wells. Morphologic changes from 3D reconstruction micrographs showing differences in soma size and length and number of primary processes. Representative images are shown; each square represents area of $100 \times 100 \mu\text{m}^2$ (upper panels) from one stack of the 3D image, and local connected fractal dimension (LCFD) characteristics from the integrated projection of the 3D image (lower panels) of one representative astrocyte (indicated by arrows to lower panels).