Figure S4. γ-secretase inhibitors do not promote OL differentiation, whereas benztropine and clemastine facilitate OL differentiation in an OL differentiation assay with acutely purified OPCs. Acutely prepared OPCs were cultured for 4 days (see methods) in the presence of increasing concentrations of test compound. 0.1% DMSO and 40 ng/ml T3 serve as negative and positive controls, respectively. Representative data shown are averaged from eight image fields per test concentration, mean ± SEM. * denotes P values versus DMSO of < 0.0001, ANOVA with Bonferroni post hoc test. For benztropine, there was a significant effect of two compound concentrations compared to DMSO [F(2.25, 6.75) = 77.80, p < 0.0001]. Post hoc comparisons indicated that the mean score for the concentrations 1.11 μM (M = 9.4x10^6, SEM = 1.71x10^5), 3.33 μM (M = 1.13x10^7, SEM = 8.01x10^5), was significantly different than DMSO. For clemastine, there was a significant effect of three compound concentrations compared to DMSO [F(10, 3) = 106.9, p < 0.0001]. Post hoc comparisons using the Bonferroni test indicated that the mean score for the concentrations 0.25 μM (M = 1.4x10^7, SEM = 7.88x10^5), 0.5 μM (M = 1.84x10^7, SEM = 3.37x10^5), 1 μM (M = 1.99x10^7, SEM = 4.7x10^5) was significantly different than DMSO.