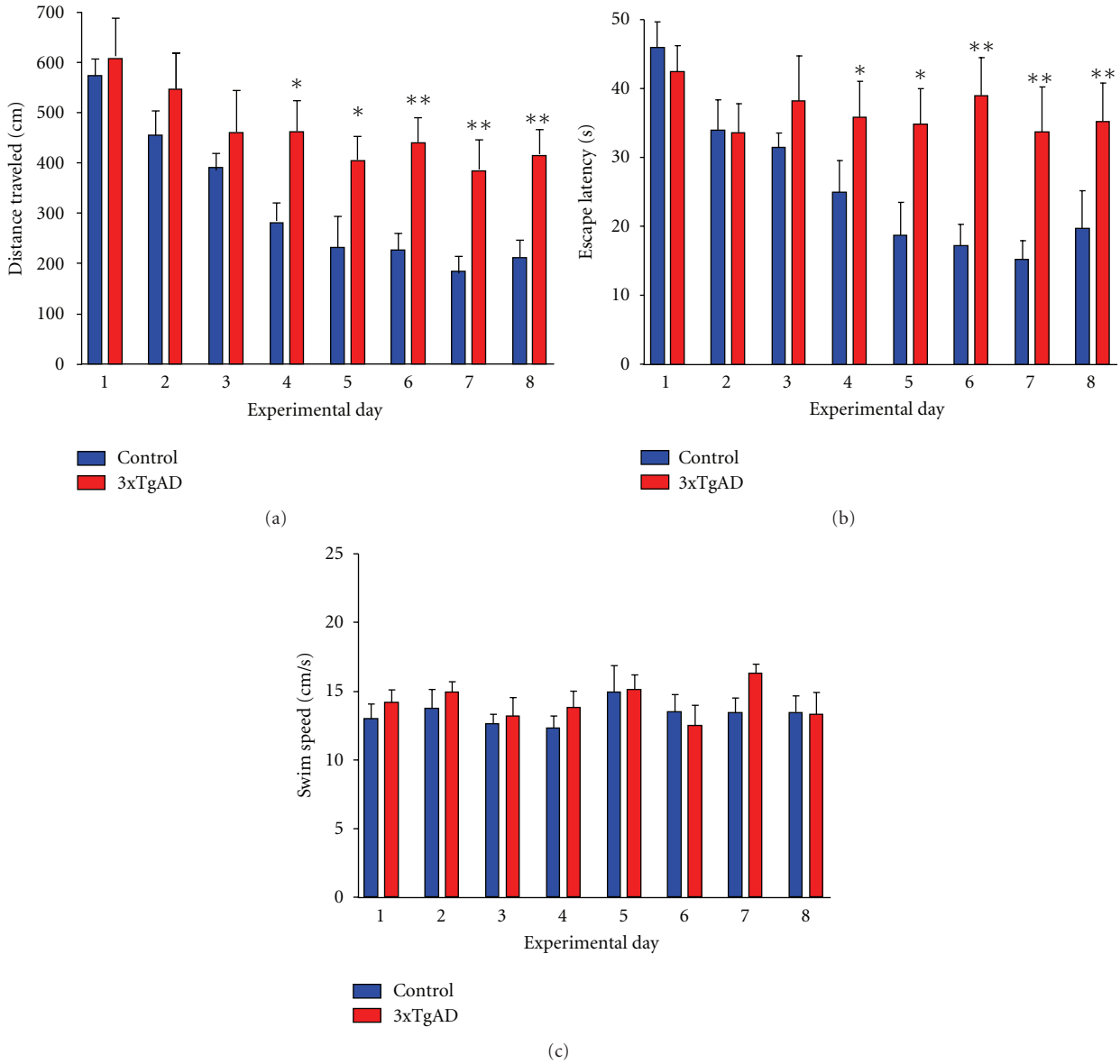

Figure 1: Morris Water Maze testing of control and 3xTgAD mice. (a) Distance travelled (cm) in the nonvisible probe target results for control ($n = 10$, blue bars) and 3xTgAD mice ($n = 10$, red bars) for 8 days of training. (b) Water maze escape latency (s) for days 1 to 8 of training in the nonvisible probe target. (c) Swim speed (cm/s) assessment of control and 3xTgAD animals during days 1–8 of training. $^{*}P < .05$; $^{**}P < .01$.

to our current data will be further addressed in subsequent manuscripts.

4.3. Differential Protein Expression in Lipid Rafts Isolated from 3xTgAD Mice Compared to Control Mice. Using an un-biased proteomic analysis of replicate lipid raft extracts, we were able to identify (from at least two individual nonambiguous peptides) multiple proteins in both control and 3xTgAD cortical extracts (control, Appendix A; 3xTgAD, Appendix B). When comparing the relative differences in lipid raft protein expression, only a small minority (17%: Figure 3(a)) of identified proteins were substantively identified in both control and 3xTgAD raft samples; however many of these common proteins identified were differentially detected (see Supplementary Table 1 in Supplementary Material available online at doi:10.4061/2010/604792). To verify the relative differential expression of multiple proteins in the control versus 3xTgAD lipid raft extracts, we also performed multiple Western blot analyses of raft centrifugal fraction-2 (F-2) samples. With loading of total equal protein quantities (50 μg: assessed in an unbiased manner with SYPRO-Ruby: Figure 3(b)) of either control or 3xTgAD F-2 samples, we assessed the relative differential expression of multiple proteins (Figures 3(c)–3(n)). From the Western blot analysis it was consistently demonstrated that