Figure S8: Effects of Na\(^+\) (saline) ejection on delay activity in PFC cells

(A) Shown are the average normalized traces in the preferred direction (left panel) and nonpreferred direction (right panel) for 16 units, which were tested with Na\(^+\) at positive current ejections of 25 nA (top panel). In green are traces for Na\(^+\) and blue are control traces. The Na\(^+\) ejection did not have substantial effects in either direction and did not suppress the cells (t-test, \(P > 0.05\)), as is shown in this study for the D1R agonist at comparable currents and polarity. Na\(^+\) ejection at 50 nA (middle panel, \(n = 3\)) and at 100 nA (bottom panel, \(n = 3\)), similarly had no consistent effects on neuronal activity (t-test, \(P > 0.05\)). Rasters and histograms are aligned to cue onset. All PSTHs were binned at 0.1s resolution. (B) Analysis of firing rate differences induced by Na\(^+\) and the three D1R agonists used in this study. Na\(^+\) ejected at positive polarity at 25 nA and 100 nA caused no significant change in neuronal firing (25 nA, t-test, \(P = 0.61\); 100 nA, t-test, \(P = 0.64\)) compared with control. The three agonists (A68930, SKF81297 and SKF38393) induced large decreases compared with control when ejected with similar current polarities. Changes in the preferred direction are shown in the left panel, and non-preferred direction in the right panel (* indicates where they were significant by t-tests, \(P < 0.05\)).