**Equimolar Detection of PSA and PSA-ACT by Generated Anti-PSA IgY Antibody**

The methodology of this assay is described in Materials and Methods section (Equimolar Detection of fPSA and PSA-ACT). Statistical analysis for different PSA : PSA-ACT ratios at different tPSA concentrations (Supplemental Data Fig. S2) was performed using a nonparametric Kruskal-Wallis test followed by Dunn’s multiple comparisons test. The Kruskal-Wallis analysis for the tPSA concentration equal to 20,000 ng/mL showed significant differences in the dataset. Dunn’s multiple comparisons test was unable to determine the exact sets within the dataset for which these differences were significant (with $P \leq 0.050$), but the lowest $P$ was obtained for the ratios 100:0 vs 0:100 ($P = 0.082$). At a concentration of 10 ng/mL of tPSA, the Kruskal-Wallis test revealed statistically significant differences, and once again, multiple comparisons Dunn’s test was unable to determine the exact sets with $P > 0.050$; however, the lowest $P$ values were obtained for the ratios 100:0 vs 0:100 PSA:PSA-ACT ratios ($P = 0.082$). For the concentration of 5,000 and 2,500 ng/mL of tPSA, there were no statistically significant differences according to Kruskal-Wallis analysis. The nonparametric test was used because of the statistically significant Brown-Forsythe test result.

**Supplemental Data Fig. S2.** Equimolar detection of fPSA and PSA-ACT using the generated anti-PSA IgY antibody tested by sandwich ELISA. Abbreviations: fPSA, free prostate specific antigen; tPSA, total prostate specific antigen; OD, optical density; PSA-ACT, PSA complexed with $\alpha$-1-antichymotrypsin.