1) Kaleidoscope marker
2) HMGB1b – 12 kD
3) HMGB1b/R26A – 12kD
4) Histone H1 – 21 kD
5) Kaleidoscope marker

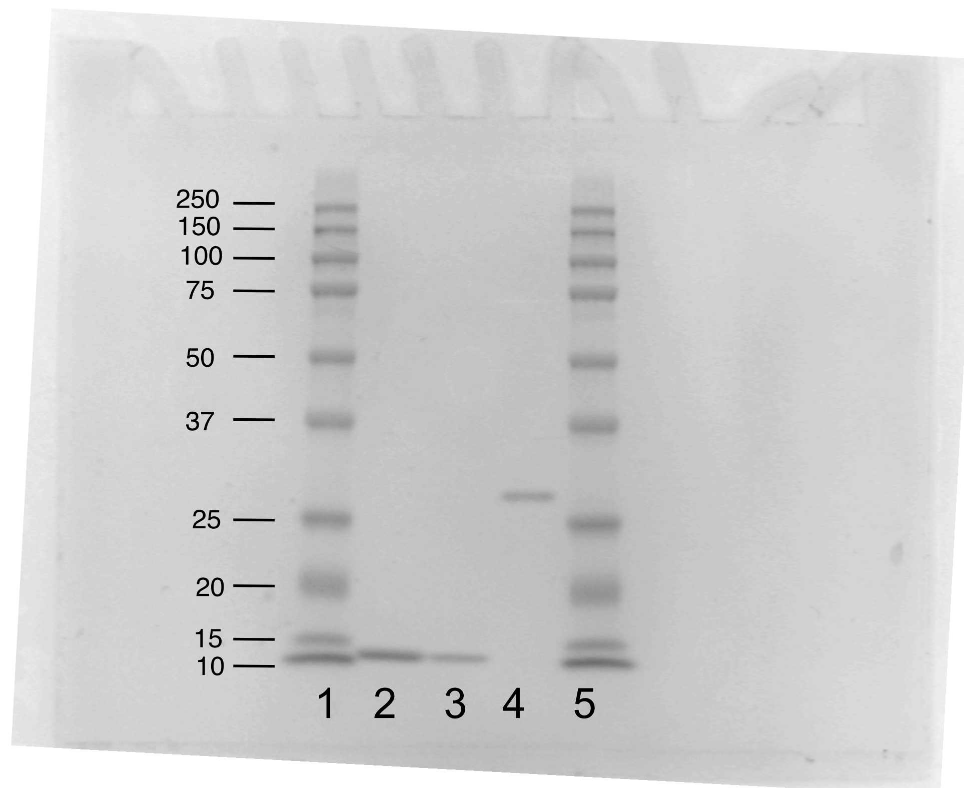

Figure 1: 12% SDS gel of HMGB1b, HMGB1b/R26A and histone H1. 1X TGX buffer run at ~125V for 1 hour. Lanes 1 and 5 contain BioRad Kaleidoscope marker. Lanes 2, 3, and 4 contain approximately 10 μM of each HMGB1b, HMGB1b/R26A and histone H1.

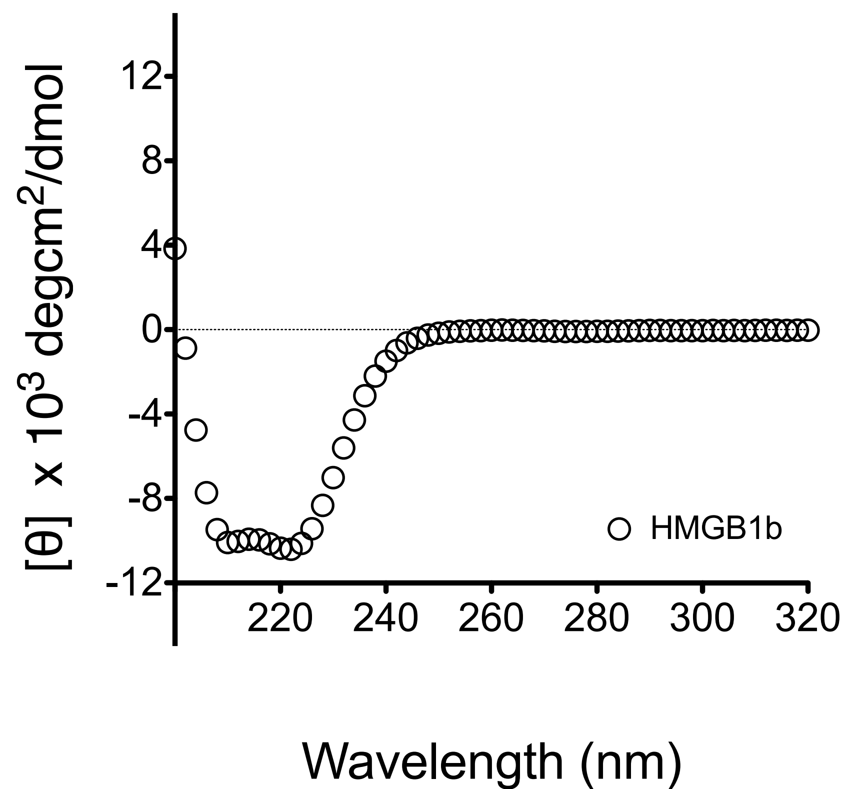

Figure 2: CD scan of 10 μM HMGB1b in the absence of four-way junctions. CD analysis buffer: 20 mM HEPES, 30 mM NH_4Cl, 200 mM KCl, 1 mM $MgCl_2$, 2 mM DTT and 10% glycerol. Triplicate analysis.

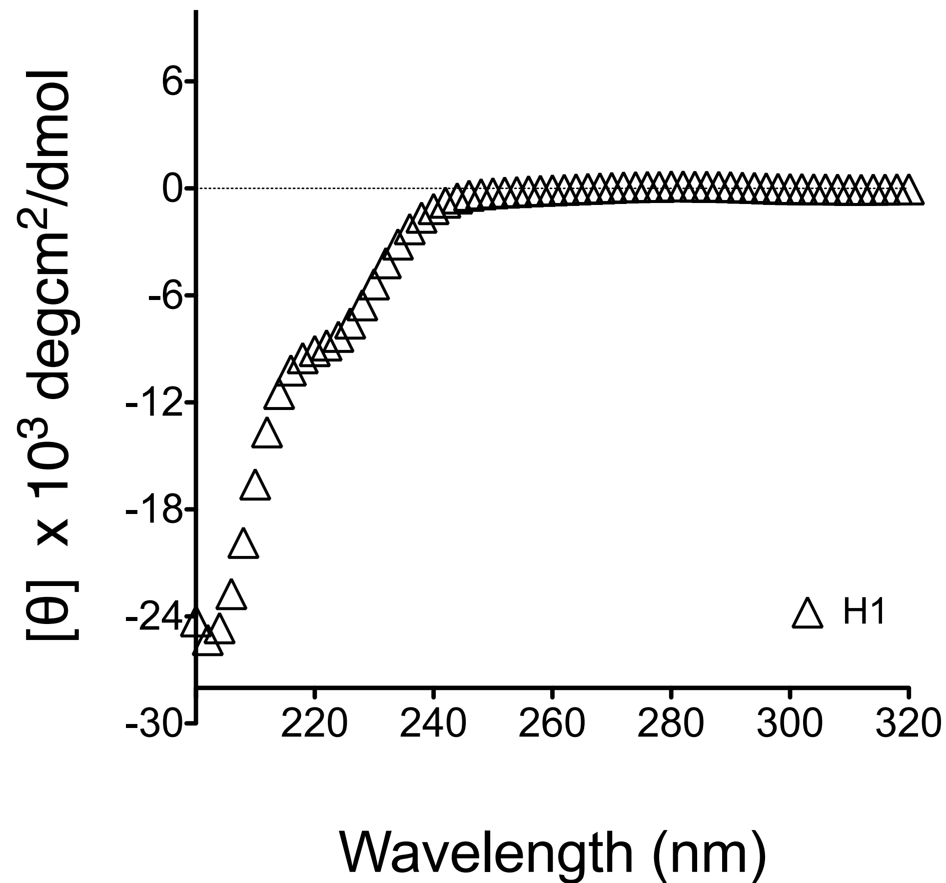

Figure 3: CD scan of 10 μM Histone H1 in the absence of four-way junctions. CD analysis buffer: 20 mM HEPES, 30 mM NH_4Cl, 200 mM KCl, 1 mM $MgCl_2$, 2 mM DTT and 10% glycerol. Triplicate analysis.

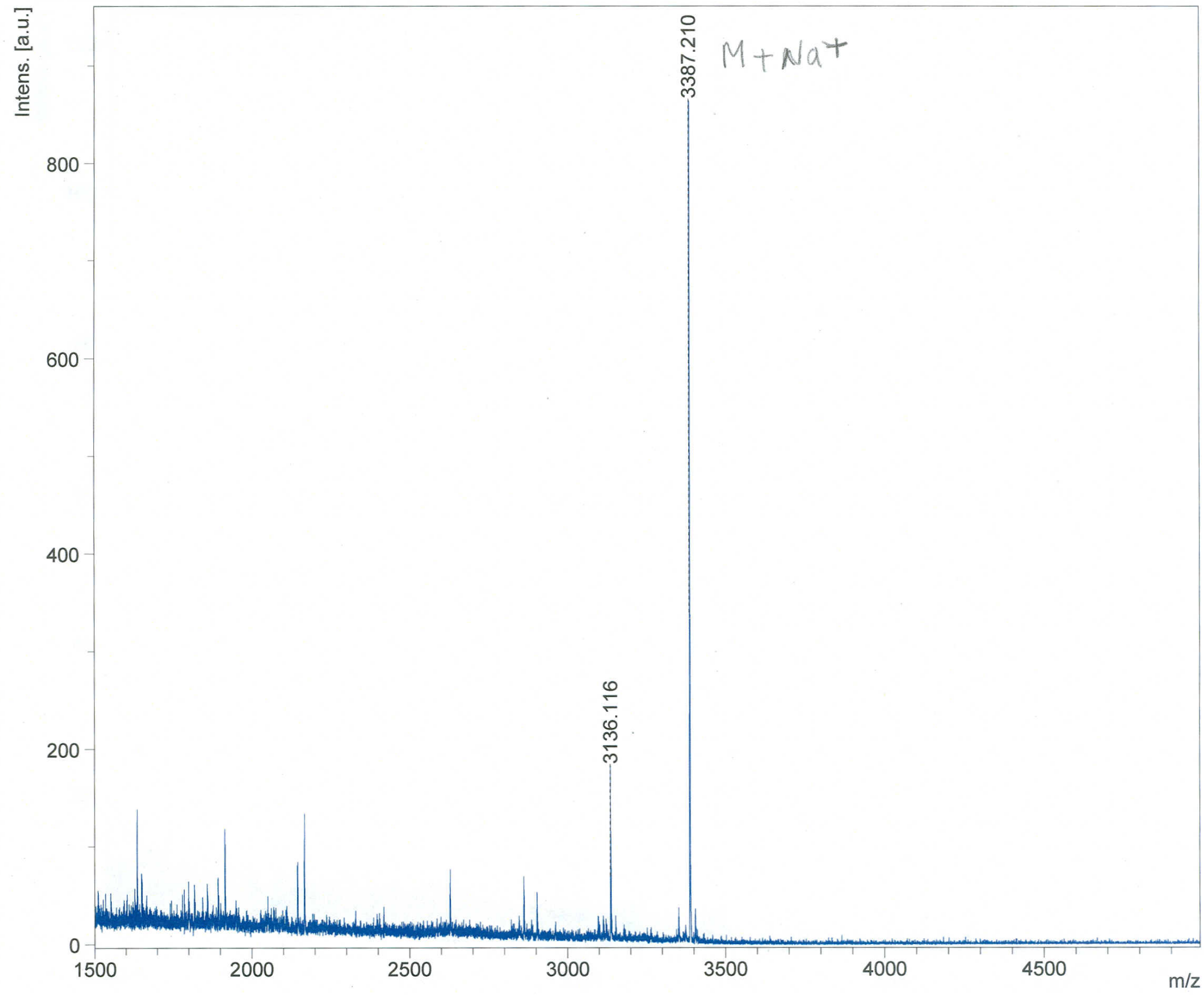

Figure 4: MALDI-MS of PNA1 indicating sample purity.
PNA1: H-CAATCCTGAGCA-K-NH_2 (MW = 3364.4); found m/z = 3387.21 ($M+Na^+$)

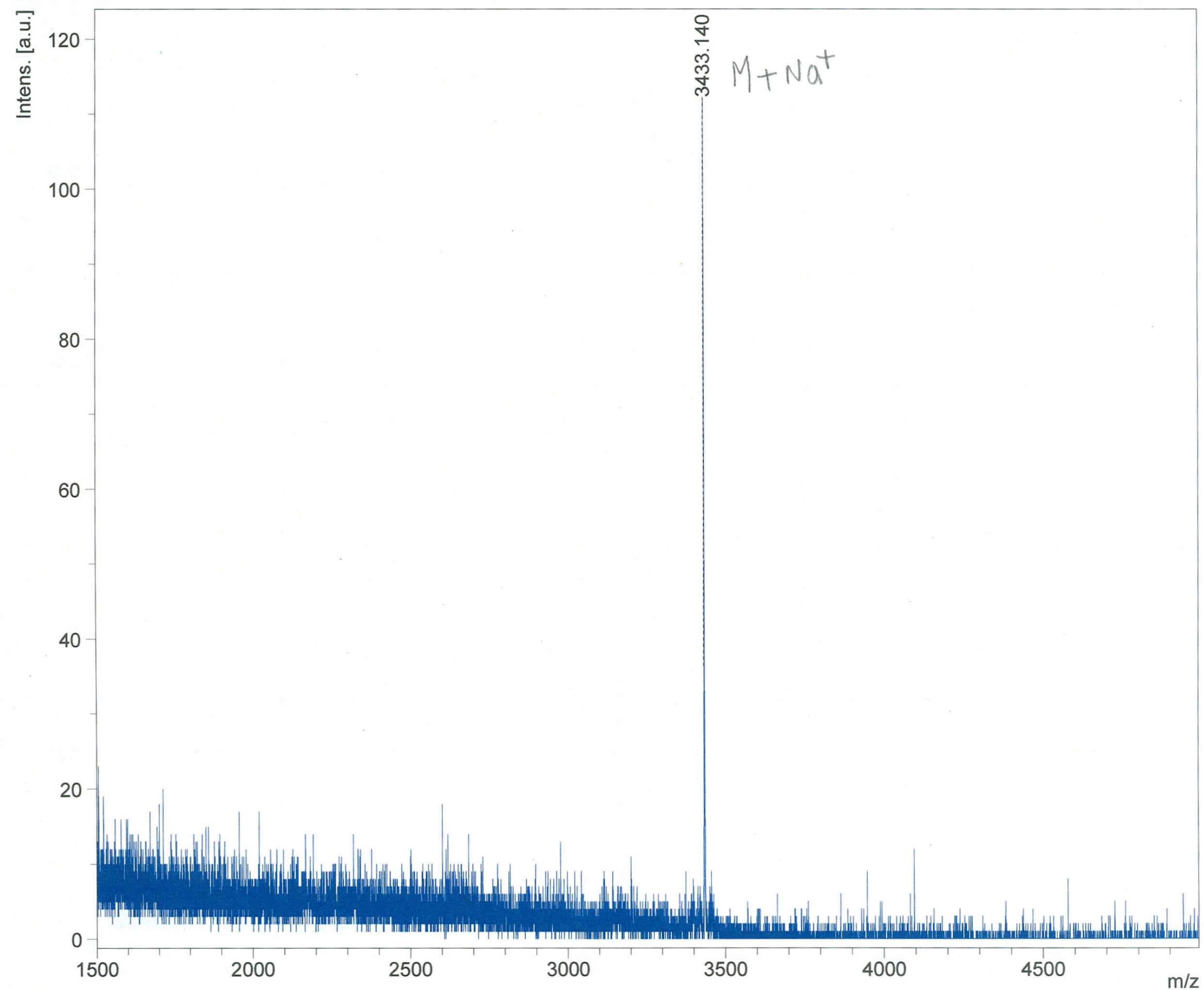

Figure 5: MALDI-MS of PNAs indicating sample purity.
PNA3: H-ATTCGGACTATG-K-NH_2 (MW = 3410.4); found m/z = 3433.14 ($M+Na^+$)

Junctions 50 nM

1) 101 (ss control)
2) J1
3) 4WJ-PNA_1
4) 4WJ-PNA_3
5) J1

Figure 6: Native PAGE gel indicating sample purity of four-way junctions (50 nM). EMSAs were run using a buffer composed of 0.5 X TBE•$MgCl_2$ buffer (45 mM Trisma, 45 mM boric acid, 1.0 mM EDTA and 1 mM $MgCl_2$), pH 8.0, at 4°C for 2 – 3 hours.