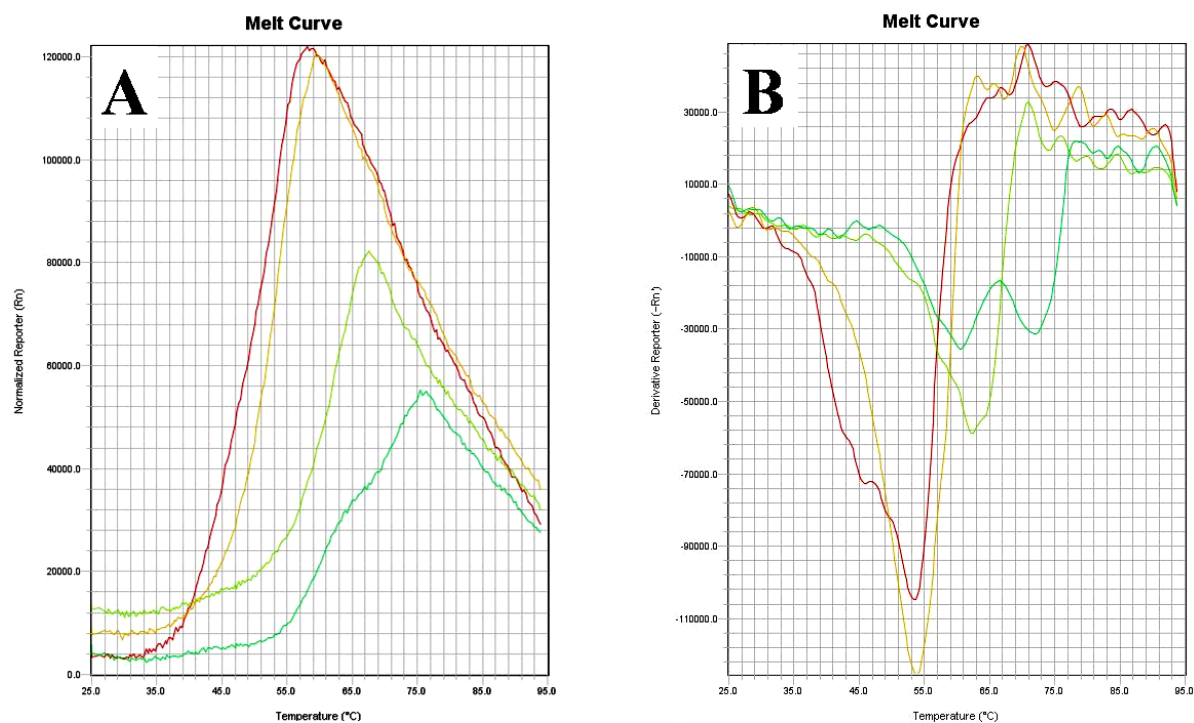


Supporting information



S2 Fig. Measurement of the binding of apoPaDHPAO with each metal candidate (Fe(II), Mn(II), and Co(II)) by a dye-binding thermal shift assay. Fluorescence changes of a SYPRO Orange dye (Invitrogen, USA) in the presence of apoPaDHPAO and each metal candidate (Fe(II), Mn(II) or Co(II)) (0.5 mM) were monitored using a real-time PCR machine with temperature increase from 25-95 °C with a constant increment of 1 °C/min. The normalized (A) and derivative (B) curves of thermal shift showed that the melting temperature (T_m) of PaDHPAO-Fe(II) complex (yellow) is ~53 °C which is similar to that of apoPaDHPAO (red). The T_m values of DHPAO-Mn(II) (green) was measured as 62 while that of PaDHPAO-Co(II) (turquoise) was measured as 61 and 72 °C.