SUPPLEMENTARY DATA

Title: Association of antitumor antibiotic Mithramycin with Mn^{2+} and the potential cellular targets of Mithramycin after association with Mn^{2+}

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Figure S1. Arrhenius plot for association of MTR with Mn^{2+} :

Plot of logarithm of rate constant ($\ln k$) against $1/T$ at different temperatures (15, 20, 25, 30 and 35°C) in 20 mM Tris-HCl pH 8.0.

Figure S3. ITC titration curve for the association of MTR and Mn^{2+} in multiple injection mode in 20 mM Tris-HCl pH 8.0 at 25°C

Figure S3 (a) Thermogram for the association of MTR (75 μM) with Mn^{2+} (2.5 mM) at 25°C in 20 mM Tris-HCl, pH 8.0 in multiple injection mode. **(b)** Thermogram of Mn^{2+} (2.5 mM) dilution in buffer at 25 °C. Top panels present the real time data and the lower panel shows the normalized enthalpy change for the reaction. The solid line through the data points represents the best fit curve for the titration

Figure S4. Binding isotherm and Scatchard plot for association of $[(\text{MTR})_2\text{Mn}^{2+}]$ complex with chromosomal DNA :

(a) Plot of fraction bound of $[(\text{MTR})_2\text{Mn}^{2+}]$ complex versus [Chromosomal DNA] as obtained from absorbance (at 400 nm) (o) and fluorescence emission (at 540 nm) (Δ) in 20 mM Tris-HCl pH 8.0 at 25°C. (b) Scatchard plot for the association of $[(\text{MTR})_2\text{Mn}^{2+}]$ complex (20 μM MTR and 1mM Mn^{2+}) with chromosomal DNA from absorbance (at 400 nm) in 20 mM Tris-HCl pH 8.0 at 25°C

Figure S5. Binding isotherm for association of $[(\text{MTR})_2\text{Mn}^{2+}]$ complex with polynucleotides:

Plot of fraction bound $[(\text{MTR})_2\text{Mn}^{2+}]$ complex against poly(dG-dC) (■) and poly(dA-dT) (●) as obtained from spectrofluorometric method in 20 mM Tris-HCl pH 8.0 at 25°C