

Supplementary data

Table S1. ITC parameters recovered for Tb³⁺ displacement of Ca²⁺ from EF hands of CaM and DREAM using a set of sites model

	n	K₁ x 10⁵	ΔH₁	-TΔS₁
DREAM(Δ64)	4.4 ± 0.9	4.8 ± 0.6	6 ± 0.6	14 ± 0.6
DREAM(Δ64) + Mg ²⁺	3.6 ± 0.7	3.2 ± 0.5	9 ± 0.1	16 ± 0.2
DREAM (Δ160)	2.4 ± 0.1	0.7 ± 0.2	9 ± 0.2	15 ± 0.3
DREAM (Δ160) + Mg ²⁺	2.2 ± 0.1	0.4 ± 0.1	8 ± 0.9	14 ± 1.0
DREAM (E234Q) + Mg ²⁺	4.8 ± 0.9	1.9 ± 0.2	4 ± 0.2	11 ± 0.2
DREAM (E186Q) + Mg ²⁺	4.5 ± 0.2	4.3 ± 0.5	5 ± 0.1	13 ± 0.1

All Experiments conducted in triplicate at 25 °C, errors are standard deviations. Enthalpy and entropy changes shown in kcal·mol⁻¹, association constants in M⁻¹.