

Supporting Information

Thermodynamic characterization of the interaction between human Y-box binding protein YB-1 and nucleic acids

Yumiko Tanabe¹, Satoru Nagatoishi^{2,3}, Kouhei Tsumoto^{1,2,3,*}

¹Department of Medical Genome Sciences, Graduate School of Frontier Sciences, The University of Tokyo, 4-6-1, Shirokanedai, Minato-ku, Tokyo 108-8639, Japan

²Department of Bioengineering, School of Engineering, The University of Tokyo, 7-3-1, Hongo, Bunkyo-ku, Tokyo 113-8656, Japan

³Medical Proteomics Laboratory, Institute of Medical Science, The University of Tokyo, 4-6-1, Shirokanedai, Minato-ku, Tokyo 108-8639, Japan

Phone: +81-3-5449-5316

Fax: +81-3-6409-2127

E-mail: tsumoto@bioeng.t.u-tokyo.ac.jp

Page S1: Contents.

Page S2: Table S1 for Molecular weights of constructs determined by size exclusion chromatography.

Page S3: Figure S1 for size exclusion chromatography of YB-1 and fragments.

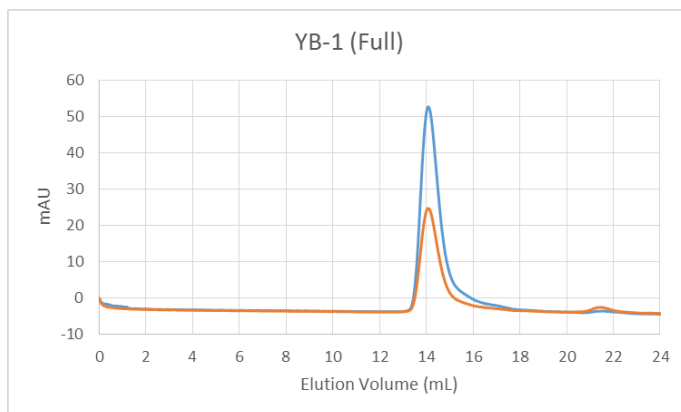
Page S4: Figure S2 for ITC profiles of the interaction between CSD and ssDNA.

Table S1. Molecular weights of constructs determined by size exclusion chromatography

	Mw calc. (kDa)	Mw obs. in SEC (kDa)
YB-1(Full)	37.0	89.5
YB-1(1-219)	24.9	52.3

Figure S1. Size exclusion chromatography of YB-1 and fragments. (A) YB-1(Full), (B) YB-1(1-219). Absorbance at 280 nm is indicated by the blue line; the orange line indicates absorbance at 260 nm.

(A)



(B)

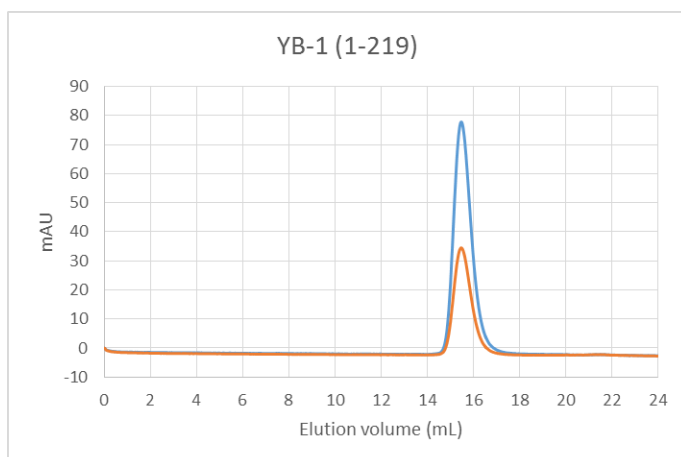


Figure S2. ITC profiles of the interaction between CSD and ssDNA. (A) 15 °C at 500 mM NaCl, (B) 30 °C at 500 mM NaCl, (C) 37 °C at 500 mM NaCl, (D) 15 °C at 150 mM NaCl, (E) 30 °C at 150 mM NaCl, (F) 37 °C at 150 mM NaCl.

