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Supplementary Information

Influence of the DNA sequence/length and pH on deaminase activity, as well as the roles of the amino acid residues around the catalytic center of APOBEC3F

Li Wan [1,2], Takashi Nagata [1,2], Masato Katahira [1,2]

[1]Institute of Advanced Energy, Kyoto University, Gokasho, Uji, Kyoto 611-0011, Japan

[2]Graduate School of Energy Science, Kyoto University, Gokasho, Uji, Kyoto 611-0011, Japan

Materials and Methods

Circular dichroism (CD) spectroscopy

Wild type and mutant A3F-CTDs (2-6 μM) were individually dissolved in the 20 mM Tris-HCl (pH 7.5) solution containing 300 mM NaCl, 0.05 % CHAPS and 1 mM DTT. CD spectra were recorded with a Jasco J-720A spectrometer (Japan Spectroscopic Co., Japan) at 25°C using a cell of the optical path of 1 mm. Each spectrum was background-corrected, smoothed, and converted to molar ellipticity [θ] (deg·cm^2·dmol^{-1}). The protein concentration was determined by the procedure described by Greenfield. [1]

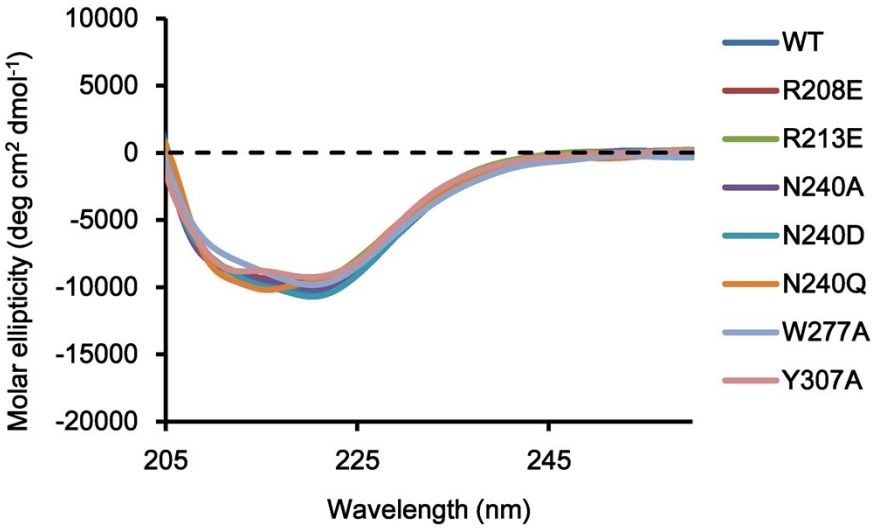

Figure S1 CD spectra of wild type and mutant A3F-CTDs whose deaminase activities were significantly low

Reference

1. N. J. Greenfield, *Nat Protoc*, 2006, **1**, 2876-2890.