Correction: Engineering of Recombinant Poplar Deoxy-D-Xyulose-5-Phosphate Synthase (PtDXS) by Site-Directed Mutagenesis Improves Its Activity

Aparajita Banerjee, Alyssa L. Preiser, Thomas D. Sharkey

S1 Fig, S2 Fig and S3 Fig are the incorrect versions of these files. Please view the correct versions below.

Supporting Information

S1 Fig. A. Zoomed in surface view of the orientation of Ala-147 residue of WT PtDXS and the thiazolium ring of ThDP in the enzyme active site. B. Cartoon view of the interactions of different residues of WT PtDXS with ThDP and their relevant distances from the thiazolium ring and the carbon chain of ThDP.

(Supporting Information PDF)

S2 Fig. SDS-PAGE of the different fractions from the Ni-NTA column purification of recombinant WT and the various mutants of PtDXS. For WT panel, lane 1–3: elution fraction containing 50 mM imidazole; lane 4–5: elution fraction containing 100 mM imidazole; lane 6–7: elution fraction containing 150 mM imidazole. For A147G panel, lane 1: flow-through; lane 2–4: wash fraction containing 10 mM imidazole; lane 5–6: elution fraction containing 250 mM imidazole; lane 7: blank. For A352G panel and A147G/A352G panel, lane 1–2: elution fraction containing 50 mM imidazole; lane 3–4: elution fraction containing 100 mM imidazole; lane 5–6: elution fraction containing 150 mM imidazole; lane 7: elution fraction containing 200 mM imidazole. L: protein marker. The molecular weight of WT and all the mutant enzymes is ~73 kDa.

(Supporting Information PDF)

S3 Fig. Michaelis-Menten plots for WT and different mutants of PtDXS in presence of each of the substrates. Each data point represents mean, error bars represent S.E. (n = 3). Different symbols represent the experimental data points. The solid lines represent the fitted curves. Black, red, blue, and pink represent the activity of WT, A147G, A352G and A147G/A352G PtDXS respectively.

(Supporting Information PDF)

Reference

1. Banerjee A, Preiser AL, Sharkey TD (2016) Engineering of Recombinant Poplar Deoxy-D-Xyulose-5-Phosphate Synthase (PtDXS) by Site-Directed Mutagenesis Improves Its Activity. PLoS ONE 11(8): e0161534. doi: 10.1371/journal.pone.0161534 PMID: 27548482