

Table S1. Kinetic parameters of 2.6-DMP oxidation by His165Ala and Arg240His mutant forms.

substrate	protein	pH optima	K _m (mM)	k _{cat} (s ⁻¹)	k _{cat} /K _m (s ⁻¹ mM ⁻¹)
2.6-DMP	SgfSLwt	9.0	0.32±0.08	0.35±0.02	1.09
	His165Ala	9.0	0.18±0.03	0.19±0.006	1.06
	Arg240His	9.0	1.09±0.15	1.28±0.06	1.17

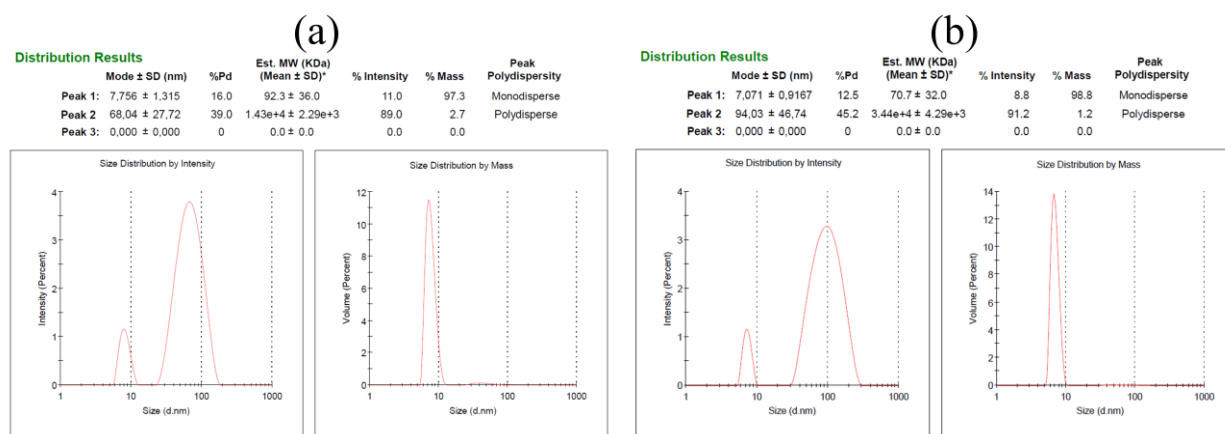


Figure S1. Dynamic light scattering peaks and reports of SgfSLwt (a) and Met199Gly (b) samples after the high-temperature incubation.