

Figure 2-figure supplement 1

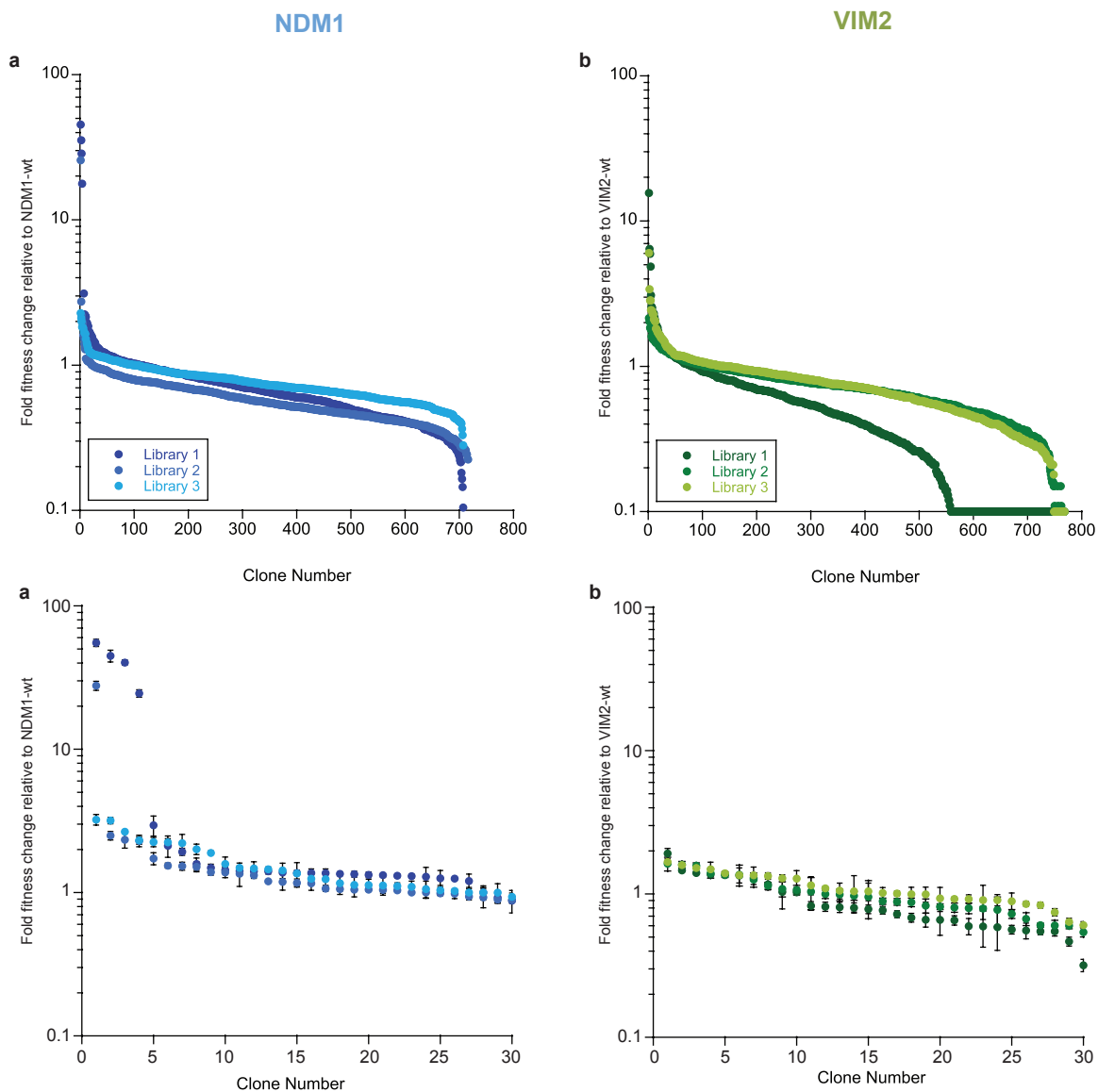


Figure 2-figure supplement 1. Screening of additional libraries. Three additional mutagenized libraries were generated by performing error-prone PCR and cloning to the expression vector from each wild-type gene. The three libraries were transformed into *E. coli* BL21 (DE3), and pre-screened with 4 μ g/ml ampicillin on agar plates. (A, B) 720 variants from each library (in total 2160 variants) were picked from the agar plates, and the cell lysate activity of variants was measured. The activity of variants is normalized to the wild-type enzyme. (C, D) Top 30 variants from each library was picked and re-assayed with triplicate. Mutations of positive variants are presented in **Supplementary File 1G**.