Kinetically Controlled Drug Resistance:
how *Penicillium brevicompactum* survives mycophenolic acid
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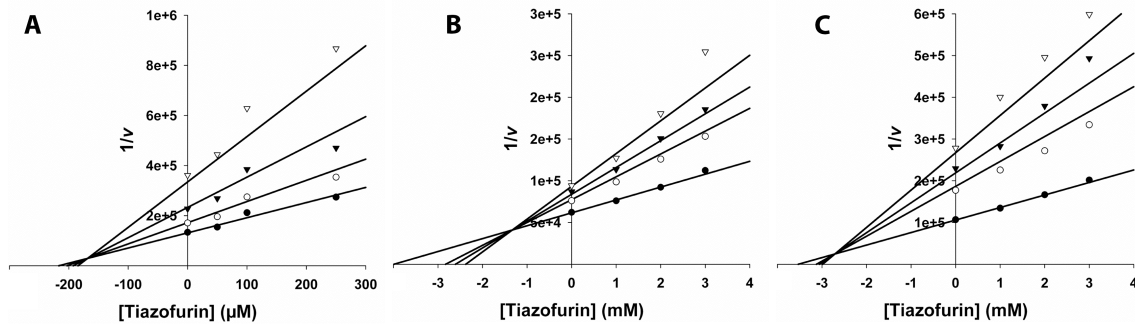
SUPPLEMENTAL DATA

FIGURE S1. Multiple inhibitor experiments. The interaction of tiazofurin and ADP is used to probe the equilibrium between E-XMP*$_{open}$ and E-XMP*$_{closed}$ as described in Methods. The values of the interaction constant α were determined by the fit to equation 6. The Dixon plots (1/v vs. tiazofurin at increasing concentrations of ADP) are shown for inspection only. A. *An*ImdA; B. *Pb*IMPDH-A; C. *Pb*IMPDH-B. The concentrations of tiazofurin used are as follows: *An*ImdA: 0, 50, 100, 250 μM; *Pb*IMPDH-A and *Pb*IMPDH-B: 0, 1, 2, 3 mM. The concentrations of ADP used for *An*ImdA are: 0 (closed circles), 1 (open circles), 2.5 (closed triangles), 5 (open triangles) mM. The concentrations of ADP used for *Pb*IMPDH-A and *Pb*IMPDH-B are: 0 (closed circles), 2.5 (open circles), 3.5 (closed triangles), 5 mM (open triangles). The inhibition constants and α value for each enzyme are listed in Table 5.2. The inhibitors are slightly synergistic for *An*ImdA and *Pb*IMPDH-B and more synergistic for *Pb*IMPDH-A.
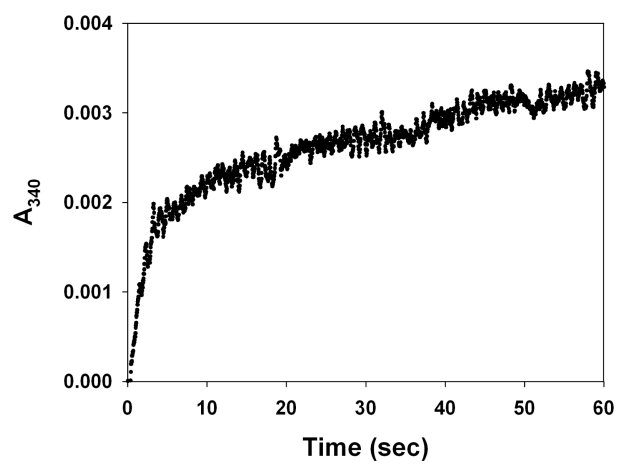
FIGURE S2. Burst of NADH production in Arg429Ala mutant of *Pb*IMPDH-B.