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All experiments were performed at least three times.

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* Statistical analysis methods should be described and justified
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* Report exact p-values wherever possible alongside the summary statistics and 95% confidence intervals. These should be reported for all key questions and not only when the p-value is less than 0.05.

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Statistical significances for ThT fluorescence kinetic assay, enzyme activity and SMPull-down assay were based on Student’s t-test. Statistical significances for Quantification of mitoGFP intensity, the Brp level and the actin-GFP level was based on One-way ANOVA post hoc Tukey test.

(For large datasets, or papers with a very large number of statistical tests, you may upload a single table file with tests, Ns, etc., with reference to sections in the manuscript.)

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* Indicate how samples were allocated into experimental groups (in the case of clinical studies, please specify allocation to treatment method); if randomization was used, please also state if restricted randomization was applied
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The source data of Figure 1B, Figure 1D-F, Figure 2C-D, Figure 3A-E, Figure 5B-D, Figure 1—figure supplement 4, Figure 1—figure supplement 7, Figure 2—figure supplement 2, Figure 2—figure supplement 4 and Figure 6—figure supplement 1B have been provided in the source data file.