

Supplementary data for the article:

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## Supplementary material

### Journal of Bioscience and Bioengineering

#### **Development of GFP-based high-throughput screening system for directed evolution of glucose oxidase**

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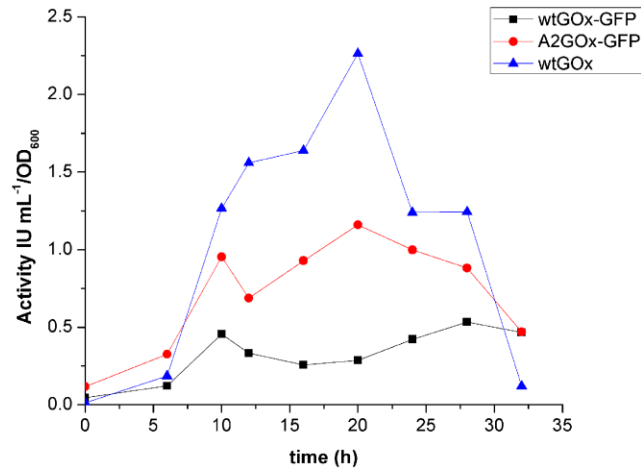
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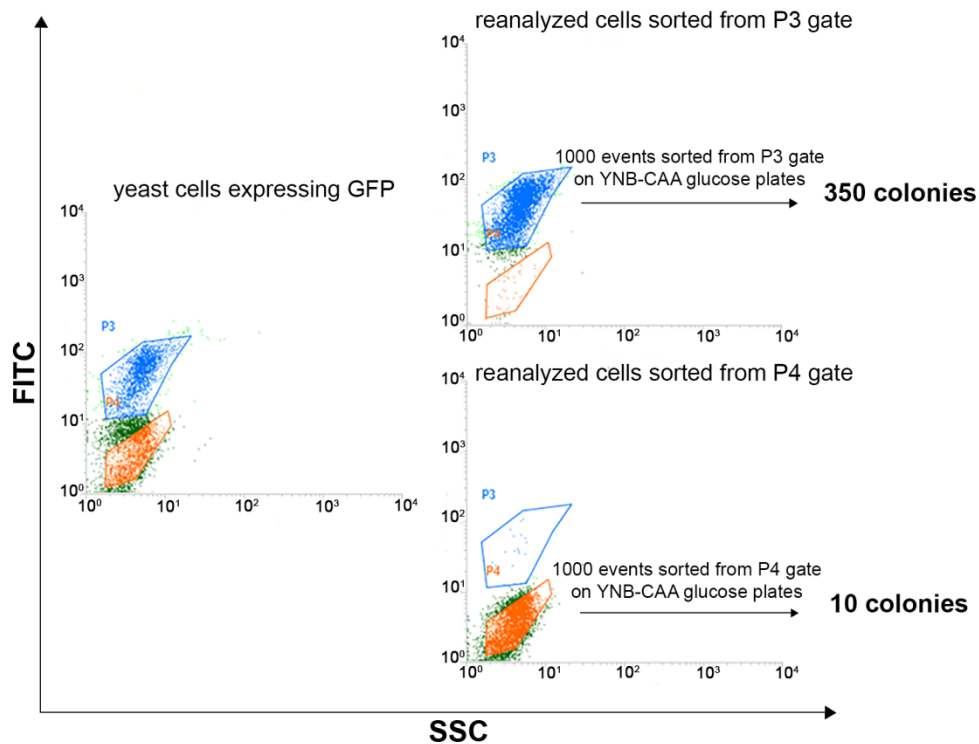
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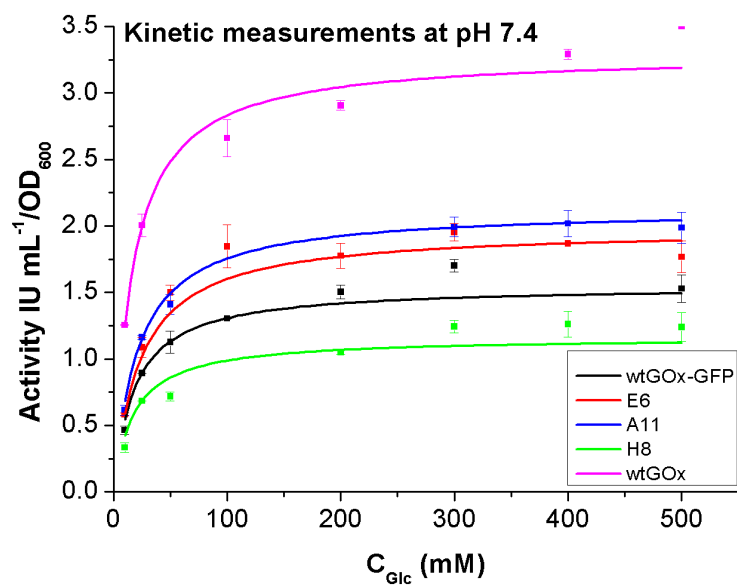
## SUPPLEMENTAL RESULTS



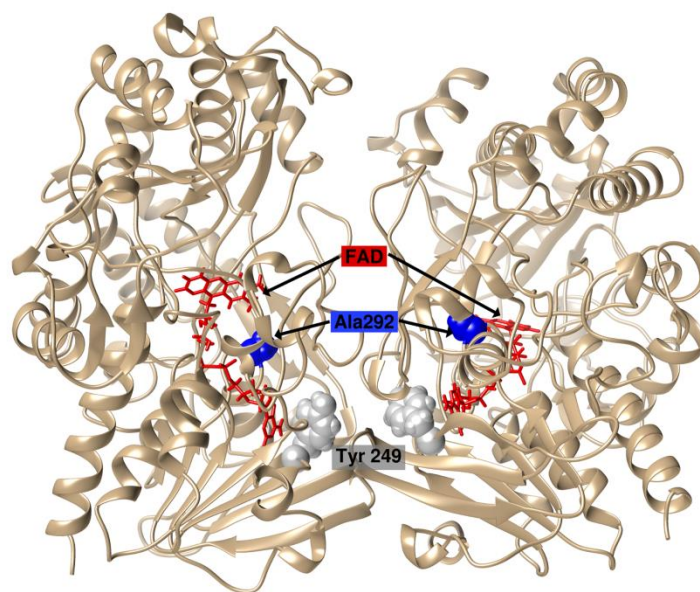
**Fig. S1** Activity of expressed wtGOx, wtGOx-GFP and A2GOx-GFP on the surface of *S. cerevisiae* EB Y100 during fermentation.



**Fig. S2** FACS recordings and survival rate of two cell populations that appear during expression of GFP on surface of the *S. cerevisiae* EB Y100 cells; P3 gate - sorted fluorescent cells, P4 gate – sorted non-fluorescent cells.



**Fig. S3** Michaelis-Menten curves for selected mutants expressed on YSD as a fusion with yGFP at pH 7.4.



**Fig. S4.** Three-dimensional structure of the dimer GOx protein (PDB: 1CF3) showing positions of the residues A292 and Y249.