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Pichia pastoris - Novel strategies for enzyme production

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PURPOSE OF THE ABSTRACT
Nature provides us with an inspiring wealth of different proteins. Protein-based (biological) molecules have unique physical and biochemical properties and are biodegradable.
Our mission is to provide solutions for the recombinant production of natural biomaterials and enzymes. Biopolymers have repetitive amino acid sequences, which give them special properties such as strength or elasticity. Others, such as transmembrane glycoproteins of viruses, may be used in diagnostics or as vaccines. Yet others can be applied as catalysts in drug design.
Recombinant enzyme production allows us to create smart materials and catalysts. To produce our enzymes we build on yeasts such as Pichia pastoris, which is known for strong gene expression, secretion, high yields, high cell densities and good scalability. Building on license-free tools and own developments we have established or own toolbox for methanol-induced and -free protein production.

FIGURES

FIGURE 1

FIGURE 2

KEYWORDS

Enzyme | Pichia pastoris | Methanol-free

BIBLIOGRAPHY