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Biochemical characterization of β -galactosidases and engineering of their product specificity

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Curriculum Vitae & Publications



Huifang Yin was born on 9th October 1987 in Zibo, Shandong Province, China. After obtaining the B.Sc of Life Science at Shandong University in July 2010, she continued a master study with a full scholarship at the same university, studying microbiology. She got a four-year scholarship from China Scholarship Council (CSC) in May 2013. After she obtained the M.Sc diploma in Shandong University, she went to the Netherlands for a Ph.D. study at University of Groningen since September 2013. Under the supervision of Prof. Lubbert Dijkhuizen and Dr. Sander. S. van Leeuwen, she worked on the project “Biochemical Characterization of β -Galactosidases and Engineering of Their Product Specificity”.

Publications

- [1] Yin, H., Pijning, T., Meng, X., Dijkhuizen, L. and van Leeuwen, S. S. (2017) Biochemical characterization of the functional roles of residues in the active site of the β -galactosidase from *Bacillus circulans* ATCC 31382. *Biochemistry* **56**, 3109-3118.
- [2] Yin, H., Pijning, T., Meng, X., Dijkhuizen, L. and van Leeuwen, S. S. (2017) Engineering of the *Bacillus circulans* β -galactosidase product specificity. *Biochemistry* **56**, 704-711.
- [3] Yin, H., Bultema, J. B., Dijkhuizen, L. and van Leeuwen, S. S. (2017) Reaction kinetics and galactooligosaccharide product profiles of the β -galactosidases from *Bacillus circulans*, *Kluyveromyces lactis* and *Aspergillus oryzae*. *Food Chem.* **225**, 230-238.
- [4] Meng, X., Pijning, T., Tietema, M., Dobruchowska, J. M., Yin, H., Gerwig, G. J., Kralj, S. and Dijkhuizen, L. (2017) Characterization of the glucansucrase GTF180 W1065 mutant enzymes producing polysaccharides and oligosaccharides with altered linkage composition. *Food Chem.* **217**, 81-90.
- [5] Meng, X., Pijning, T., Dobruchowska, J. M., Yin, H., Gerwig, G. J. and Dijkhuizen, L. (2016) Structural determinants of alternating ($\alpha 1 \rightarrow 4$) and ($\alpha 1 \rightarrow 6$) linkage specificity in reuteransucrase of *Lactobacillus reuteri*. *Sci. Rep.* **6**, 35261.