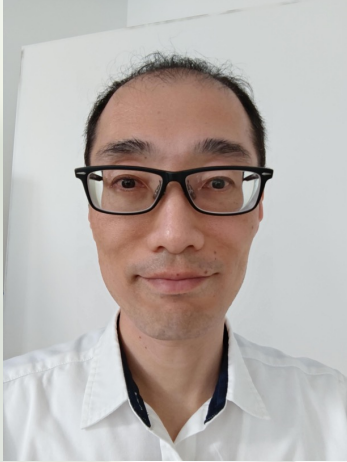


Exploration of new carbohydrate-associated enzymes



Assoc. Prof. Masahiro NAKAJIMA

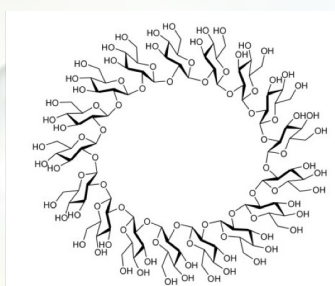
Tokyo University of Science, Faculty of Science and Technology, Department of Applied Biological Science
Tokyo, JAPAN

Thursday, 20.06.2024, 09:00 – 10:00

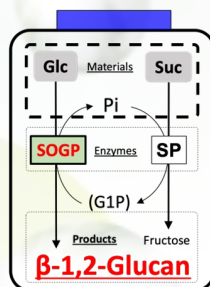
MC1.A.EG.007 (HS MC 1)

Campus der Med Uni Graz Ost, Neue Stiftingtalstraße 6, 8010 Graz

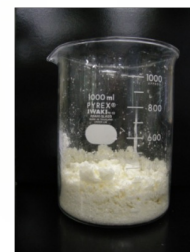
Glycans can play a variety of important roles in nature due to the complexity and diversity of their chemical structures. Correspondingly, enzymes that synthesize and decompose glycans have been extensively diversified by molecular evolution. And we still do not know the extent to which they are. Our group mainly are exploring enzymes acting on β -1,2-glucans, unique glucose polymers, to understand the diversity of biochemical functions, structures, and reaction mechanisms of carbohydrate-associated enzymes.



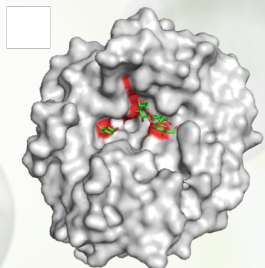
Cyclic β -1,2-glucan



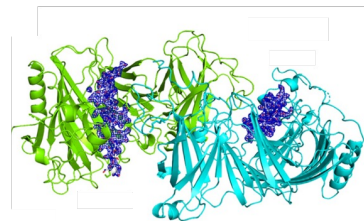
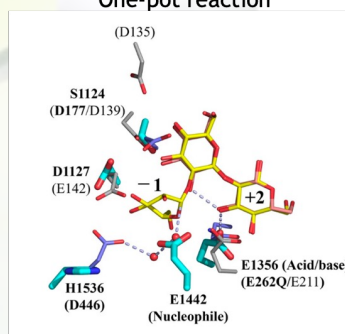
One-pot reaction



Large-scale production



First identified β -1,2-glucanase



β -1,2-Glucanase from *E. coli*

