

Electronic supplementary material
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An *Aspergillus nidulans* β -mannanase with high transglycosylation capacity revealed through comparative studies within glycosidase family 5

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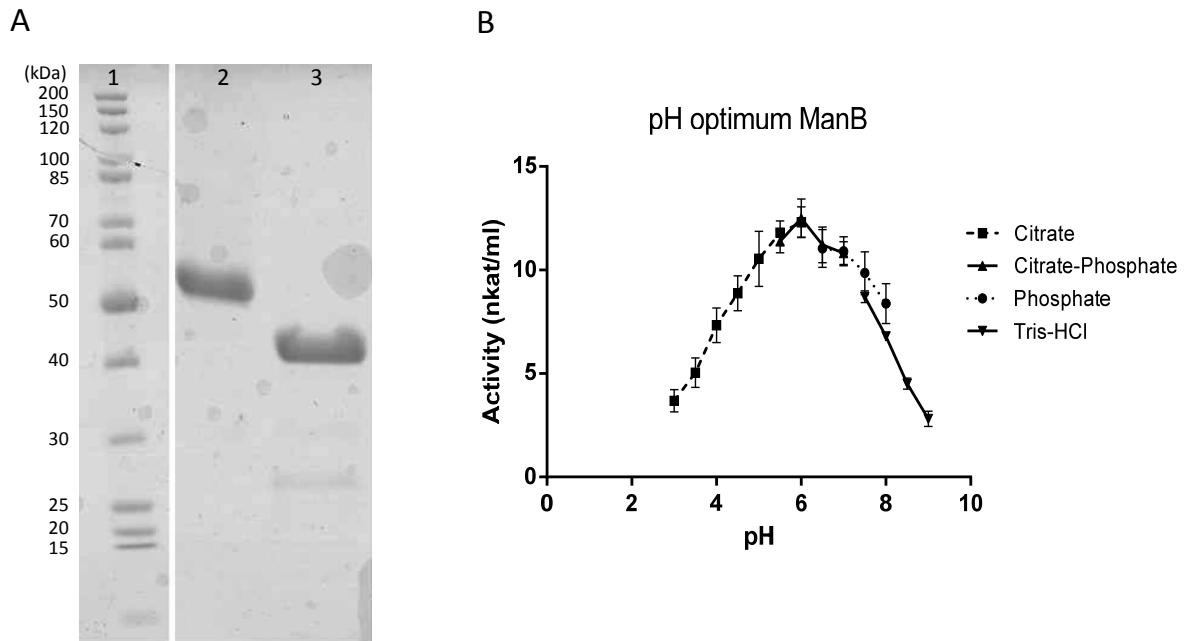
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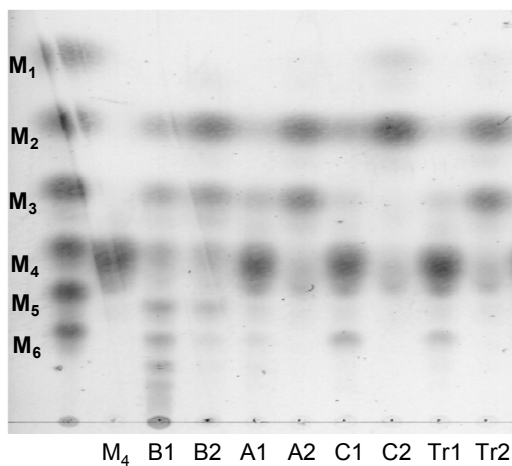
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Supplemental Table S1 Quality parameters of the AnMan5B homology model, evaluated with MolProbity. For comparison the values for the template are shown in parenthesis.

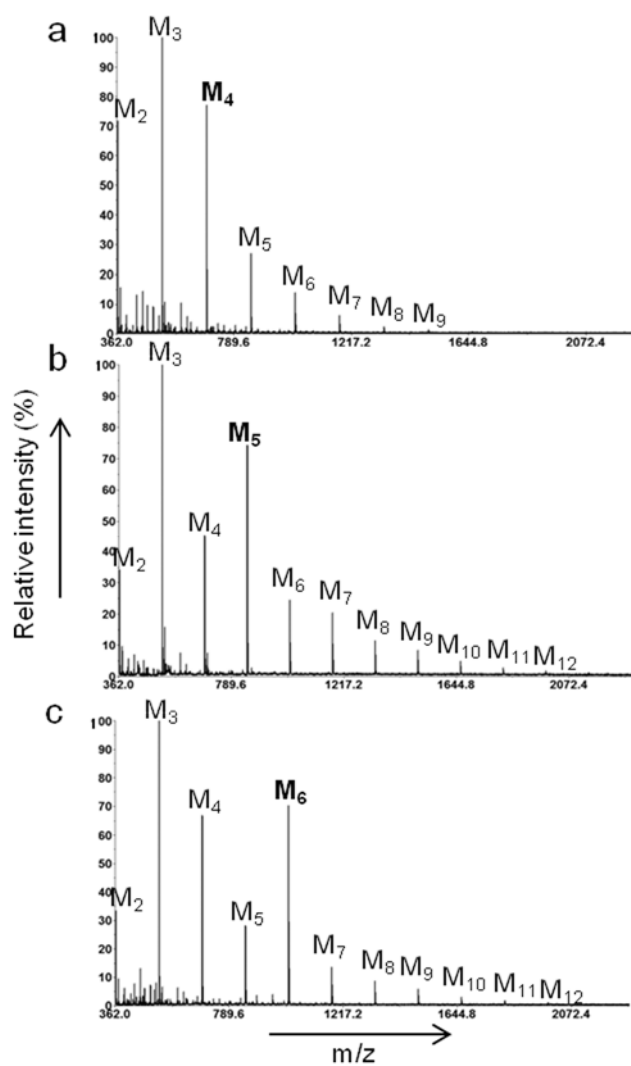
AnMan5B model (template, 1QNR)	
Number of residues	350 (344)
Sequence identity	48 % (-)
Ramachandran favored	92.82 % (97.37 %)
Ramachandran outliers	1.72 % (0.00 %)
Poor rotamers	5.72 % (0.71 %)
Clashscore	27.44 (4.53)
Residues with bad bonds	0.29 % (0.29 %)
Residues with bad angles	2.86 % (1.74 %)



Supplemental Fig. S1 a; SDS-PAGE from the deglycosylation study showing molecular weight marker (1), purified AnMan5B (2) and purified AnMan5B treated with endoH (3). **b**; pH optimum for AnMan5B, using LBG as substrate.



Supplemental Fig. S2 TLC analysis of 5 mM M_4 incubation for 0.5 h, using two different enzyme loads, based on activity on LBG. AnMan5B; B1: 450 nM and B2: 9045 nM, AnMan5A; A1: 15 nM and A2 290 nM, AnMan5C; C1: 15 nM and C2: 300 nM and TrMan5A; Tr1: 9 nM and Tr2: 190 nM. Standard manno-oligosaccharides M_1 - M_6 are shown to the left.



Supplemental Fig. S3 MALDI-TOF MS spectra of AnMan5B incubations in H₂¹⁸O with **a**; M₄ 60 min, **b**; M₅ 60 min and **c**; M₆ 30 min. Products with lower DP than the substrates are present in the spectra, as well as transglycosylation products up to DP9 (a) and DP12 (b, c). No ¹⁸O-labeled oligosaccharide was detected.