The roles of the zinc finger transcription factors XlnR, ClrA and ClrB in the breakdown of lignocellulose by Aspergillus niger

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Additional file 1: Table S1. Primers used in this study. Fig S1. Silver stained protein gel on supernatants from cultures transferred to wheat straw for 24h and 48h. Fig S2. Expression of the actA gene measured by qRT-PCR in the WT, ΔclrA, ΔclrB and ΔxlnR strains. The results shown represent triplicates of three independent biological samples and the error bars indicate the standard error of the mean. Fig S3. Test for a cell wall stress by using cell wall stressors such as Sodium Dodecyl Sulfate (SDS, 70 µg/ml), CalcoFluor White (CFW, 50 µg/ml) and Congo Red (CR, 250 µg/ml) in Petri dishes.

| Name               | Sequence (5’ - 3’)                                      | Function                      |
|--------------------|---------------------------------------------------------|-------------------------------|
| AnXlnRNotIup       | ATGCATGGCGGCCCTCCCAACTTTATTCACCTCC                     | xlnR deletion upstream external |
| AnXlnRHiindIIIup   | ATGCATAAGCTTGGAAATTTTCGAAGAAGTGG                       | xlnR deletion upstream internal |
| AnXlnRHiindIIIdw   | ATGCATAAGCTTTTTTGACGTAACACGGCTG                       | xlnR deletion downstream internal |
| AnXlnRspeIdw       | ATGCATACTAAGTAGCTACGGGATCCCCACGAAG                   | xlnR deletion downstream external |
| AnXlnRScexup       | CAGACTGAATCGGAATGC                                      | Screen xlnR deletion, external |
| AnXlnRScexdw       | GCTTAAAGAGGGGGGTTTGG                                   | Screen xlnR deletion, external |
| AnXlnRScinup       | CACCATTGAGCTGCAGCCC                                    | Screen xlnR deletion, internal |
| AnXlnRScindw       | GCTTGGTCTGGCATAACAG                                    | Screen xlnR deletion, internal |
| Clr1 up F          | tattatGAATTACGCGGGTTTCAAACATTC                       | clrA deletion upstream external |
| Clr1 up R          | tattatGGAATTCCACCAGGGGGCTGAAAGCATC                    | clrA deletion upstream internal |
### Table S1 Primers used in this study

| Clr1 down F | tatattGGTACCAAGAGGCACCTTGACTTGAG | clrA deletion downstream internal |
| Clr1 down R | tatattGCGGCCAGCCCTGATTGTCCCGAGAAGAA | clrA deletion downstream external |
| Clr1 gene F | CCCTCTCAACCTCTACCAA | Screen clrA deletion, internal |
| Clr1 gene R | TGAGGCCCTGGACGCTACTAT | Screen clrA deletion, internal |
| qPCR BglB F | AGGTGGAGATTGTGGTGAG | qRT-PCR bglB |
| qPCR BglB R | CCCAATACCTCGTCCTCTCA | qRT-PCR bglB |
| qPCR ClrA F | GCCTCTCAATTGAGAAGTGG | qRT-PCR clrA |
| qPCR ClrA R | CGTCAATGGGGTTCAGACATA | qRT-PCR clrA |
| qPCR ClrB F | GGACGCGCAATTGGAGATGGT | qRT-PCR clrB |
| qPCR ClrB R | AGCTGTCGCTCTTGATGAT | qRT-PCR clrB |
| qPCR EglC F | CGATGGTTATACGGGGTCTC | qRT-PCR eglC |
| qPCR EglC R | GCCGAAGTCGAACTCTAC | qRT-PCR eglC |
| qPCR XynA F | TTATGCGCTGGGTGGTGGTGA | qRT-PCR xynA |
| qPCR XynA R | TGCCCGCTAATTTAGGTAG | qRT-PCR xynA |
| qPCR cbhA F | CCAGCAAGCCTGAGCCGCTCA | qRT-PCR cbhA |
| qPCR cbhA R | AACGCGCGCTTGAGCCACCA | qRT-PCR cbhA |

![Silver stained protein gel on supernatants from cultures transferred to wheat straw for 24 h and 48 h](image)

**Fig.S1** Silver stained protein gel on supernatants from cultures transferred to wheat straw for 24 h and 48 h
**Fig. S2** Expression of the *actA* gene measured by qRT-PCR in the WT, ΔclrA, ΔclrB and ΔxlnR strains. The results shown represent triplicates of three independent biological samples and the error bars indicate the standard error of the mean.

**Fig. S3** Test for a cell wall stress by using cell wall stressors such as Sodium Dodecyl Sulfate (SDS, 70 µg/ml), CalcoFluor White (CFW, 50 µg/ml) and Congo Red (CR, 250 µg/ml) in Petri dishes.