# Nucleotide sequence of the cellobiohydrolase gene from *Trichoderma viride*

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The filamentous fungus, *Trichoderma viride*, secretes large amounts of several cellulolytic enzymes (1). We report here the nucleotide sequence of the gene coding for exo-cellobiohydrolase (CBH), which accounts for more than 65% of the total cellulase content. This gene was isolated from a *T. viride* genomic library using a 30mer oligonucleotide based on the sequence of the reported CBHI gene of *T. reesei* (2). The amino acid sequence deduced from the nucleotide sequence is highly homologous (95%) to that of the *T. reesei* CBHI gene. In contrast to the high homology between the enzyme coding regions of the two CBH genes, 67% and 30% homology was found between the 5'-non

coding and 3'-non coding regions, respectively. Southern-blot and Northern-blot analysis showed the presence of at least one CBH gene on the *T. viride* chromosome which was transcribed only at the culture condition that cellulase production was induced.

## REFERENCES

1. Mandels,M. *et al.*, (1975) in *Symposium on Enzymatic Hydrolysis of Cellulose* (Bailey,M. *et al.*, eds), pp. 81–109.
2. Shoemaker,S. *et al.* (1983) *Bio/Technology* 1, 691–696.



Nucleotide sequence of CBH. The deduced amino acid sequence is shown below the coding region of the gene and numbered, on the left, from the amino-terminus (Gln) of the mature enzyme. Introns (I and II) are shown in lower-case letters. The putative TATA box sequence is underlined. The amino acid sequence of the amino terminal region of the purified enzyme, which was determined chemically, is double underlined. The stop codon is indicated by asterisks.

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