

Klonování genu pro glukosa oxidasu z *A. niger*

>AF234246.2:486-2303 *Aspergillus niger* glucose oxidase (GO2) gene, complete cds

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ATGCAGACTCTCCTTGTGAGCTCGCTTGTGGTCTCCCTCGCTGCGGCCCTGCCACACTACATCAGGAGCA
ATGGCATTGAAGCCAGCCTCCTGACTGATCCCAAGGATGTCTCCGGCCGCACGGTCGACTACATCATCGC
TGGTGGAGGTCTGACTGGACTCACCACCGCTGCTCGTCTGACGGAGAACCCCAACATCAGTGTGCTCGTC
ATCGAAAGTGGCTCCTACGAGTCGGACAGAGGTCTATCATTGAGGACCTGAACGCCTACGGCGACATCT
TTGGCAGCAGTGTAGACCACGCCTACGAGACCGTGGAGCTCGCTACCAACAATCAAACCGCGCTGATCCG
CTCCGAAATGGTCTCGGTGGCTCTACTCTAGTGAATGGTGGCACCTGGACTCGCCCCACAAGGCACAG
GTTGACTCTTGGGAGACTGTCTTTGGAAATGAGGGCTGGAAGTGGGACAATGTGGCCGCTACTCCCTCC
AGGCTGAGCGTGTCTCGCGACCAAATGCCAAACAGATCGCTGCTGGCCACTACTTCAACGCATCCTGCCA
TGGTGTAAATGGTACTGTCCATGCCGGACCCCGCGACACCGGCGATGACTATTCTCCCATCGTCAAGGCT
CTCATGAGCGTGTCTGAAGACCGGGGCGTTCCCAACAAAGAAAGACTTCGGATGCGGTGACCCCATGGTG
TGTCCATGTTCCCAACACCTTGCACGAAGACCAAGTGCCTCGGATGCCGCTCGCGAATGGCTACTTCC
CAACTACCAACGTCCCAACCTGCAAGTCCTGACCGGACAGTATGTTGGTAAGGTGCTCCTTAGCCAGAAC
GGCACCACCCCTCGTGCCGTTGGCGTGGAATTCGGCACCCACAAGGGCAACACCCACAACGTTTACGCTA
AGCACGAGGTCTCCTGGCCGCGGGCTCCGCTGTCTCTCCACAATCCTCGAATATTCCGGTATCGGAAT
GAAGTCCATCCTGGAGCCCCTTGGTATCGACACCGTTCGTTGACCTGCCCGTTCGGCTTGAACCTGCAGGAC
CAGACCACCGCTACCGTCCGCTCCCGCATCACCTCTGCTGGTGCAGGACAGGGACAGGCCGCTTGGTTCG
CCACCTTCAACGAGACCTTTGGTGACTATTCCGAAAAGGCACACGAGCTGCTCAACACCAAGCTGGAGCA
GTGGGCCGAAGAGGCCGTCGCCCCGTGGCGGATTCCACAACACCACCGCCTTGCTCATCCAGTACGAGAAC
TACCGCGACTGGATTGTCAATCACAACGTTCGCGTACTCGGAACTCTTCCCTCGACACTGCCGGAGTGGCCA
GCTTCGATGTGTGGGACCTTCTGCCCTTCGACCGAGGATACGTCCACATCCTCGACAAGGACCCCTACCT
CCACCACCTTTCCTACGACCCTCAGTACTTCCCTCAACGAGCTCGACCTGCTCGGTCAGGCTGCCGCTACT
CAGCTGGCCCCGAACATCTCCAACCTCCGGTGCCATGCAGACCTACTTCGCTGGGGAGATACTCCCCGGTG
ATAACCTCGCGTATGATGCCGATTTGAGCGCCTGGACTGAGTACATCCCGTACCCTTCCGTCCCTAACTA
CCATGACGTAGGTACTTGTCCATGATGCCGAAGGAGATGGGCAGTGTGTTGATAATGCTGCCCGTGTG
TATGGTGTGCGGGGACTGCGTGTGATTGATGGTTCTATTCCCTCCTACGCAAATGTCGTCCCATGTCATGA
CGGTGTTCTATGCCATGGCTTTGAAAATTTCCGATGCTATCTTGAAGATTATGCTCCATGCAGTGA
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N-HIS,T7-GO2-HIS

*Bam*H1 (GGATCC)

*Xho*I (CTCGAG)

5` TCGCGGATCCCTGCCACACTACATCAGGAGCA

5` GGTGCTCGAGCTGCATGGAAGCATAATCTTCCA

N-HIS,T7-GO2

N-HIS-GO2

>AAF59929.2 glucose oxidase [Aspergillus niger]

MQTLLVSSLVSLAAALPHYIRSNGIEASLLTDPKDVSGRTVDYIIAGGGLTGLTTAARLTENPNISVLV
 IESGSYESDRGPIIEDLNAYGDI FGSSVDHAYETVELATNNQTALIRSGNGLGGSTLVNNGGTWTRPHKAQ
 VDSWETVFGNEGWNWDNVAAYS LQAERARAPNAKQIAAGHYFNASCHGVNGTVHAGPRD TGDDYSPIVKA
 LMSAVEDRGVPTKKDFGCGDPHGVS MFPNTLHEDQVRS DAAREWLLPNYQRPNLQVLTGQYVGVKVL LLSQN
 GTTPRAVGVEFGTHKGNTHN VYAKHEVLLAAGSAVSPTILEYSGIGMKSILEPLGIDTVVDLPVGLNLQD
 QTTATVRSRITSAGAGQGQA AWFATFNETF GDYSEKAHELLNTKLEQWAE EAVARGGFHNTALLIQYEN
 YRDWIVNHN VAYSELFLDTAGVASF DVWDL LFPDRGYVHILDKDPYLH HFAYDPQYFLNELDLLGQAAAT
 QLARNISNSGAMQTYFAGEILPGDN LAYDADLSAWTEYI PYHFRPNYHDVGTCSMMPKEMGSVVDNAARV
 YGVRGLRVIDGSIPTQMSSHVMTVFYAMALKISDAILEDYASMQ

