**Klonování genu pro glukosa oxidasu z *A. niger***

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

ATGCAGACTCTCCTTGTGAGCTCGCTTGTGGTCTCCCTCGCTGCGGCCCTGCCACACTACATCAGGAGCA

ATGGCATTGAAGCCAGCCTCCTGACTGATCCCAAGGATGTCTCCGGCCGCACGGTCGACTACATCATCGC

TGGTGGAGGTCTGACTGGACTCACCACCGCTGCTCGTCTGACGGAGAACCCCAACATCAGTGTGCTCGTC

ATCGAAAGTGGCTCCTACGAGTCGGACAGAGGTCCTATCATTGAGGACCTGAACGCCTACGGCGACATCT

TTGGCAGCAGTGTAGACCACGCCTACGAGACCGTGGAGCTCGCTACCAACAATCAAACCGCGCTGATCCG

CTCCGGAAATGGTCTCGGTGGCTCTACTCTAGTGAATGGTGGCACCTGGACTCGCCCCCACAAGGCACAG

GTTGACTCTTGGGAGACTGTCTTTGGAAATGAGGGCTGGAACTGGGACAATGTGGCCGCCTACTCCCTCC

AGGCTGAGCGTGCTCGCGCACCAAATGCCAAACAGATCGCTGCTGGCCACTACTTCAACGCATCCTGCCA

TGGTGTTAATGGTACTGTCCATGCCGGACCCCGCGACACCGGCGATGACTATTCTCCCATCGTCAAGGCT

CTCATGAGCGCTGTCGAAGACCGGGGCGTTCCCACCAAGAAAGACTTCGGATGCGGTGACCCCCATGGTG

TGTCCATGTTCCCCAACACCTTGCACGAAGACCAAGTGCGCTCCGATGCCGCTCGCGAATGGCTACTTCC

CAACTACCAACGTCCCAACCTGCAAGTCCTGACCGGACAGTATGTTGGTAAGGTGCTCCTTAGCCAGAAC

GGCACCACCCCTCGTGCCGTTGGCGTGGAATTCGGCACCCACAAGGGCAACACCCACAACGTTTACGCTA

AGCACGAGGTCCTCCTGGCCGCGGGCTCCGCTGTCTCTCCCACAATCCTCGAATATTCCGGTATCGGAAT

GAAGTCCATCCTGGAGCCCCTTGGTATCGACACCGTCGTTGACCTGCCCGTCGGCTTGAACCTGCAGGAC

CAGACCACCGCTACCGTCCGCTCCCGCATCACCTCTGCTGGTGCAGGACAGGGACAGGCCGCTTGGTTCG

CCACCTTCAACGAGACCTTTGGTGACTATTCCGAAAAGGCACACGAGCTGCTCAACACCAAGCTGGAGCA

GTGGGCCGAAGAGGCCGTCGCCCGTGGCGGATTCCACAACACCACCGCCTTGCTCATCCAGTACGAGAAC

TACCGCGACTGGATTGTCAATCACAACGTCGCGTACTCGGAACTCTTCCTCGACACTGCCGGAGTGGCCA

GCTTCGATGTGTGGGACCTTCTGCCCTTCGACCGAGGATACGTCCACATCCTCGACAAGGACCCCTACCT

CCACCACTTTGCCTACGACCCTCAGTACTTCCTCAACGAGCTCGACCTGCTCGGTCAGGCTGCCGCTACT

CAGCTGGCCCGCAACATCTCCAACTCCGGTGCCATGCAGACCTACTTCGCTGGGGAGATACTCCCCGGTG

ATAACCTCGCGTATGATGCCGATTTGAGCGCCTGGACTGAGTACATCCCGTACCACTTCCGTCCTAACTA

CCATGACGTAGGTACTTGCTCCATGATGCCGAAGGAGATGGGCAGTGTTGTTGATAATGCTGCCCGTGTG

TATGGTGTGCGGGGACTGCGTGTCATTGATGGTTCTATTCCTCCTACGCAAATGTCGTCCCATGTCATGA

CGGTGTTCTATGCCATGGCTTTGAAAATTTCGGATGCTATCTTGGAAGATTATGCTTCCATGCAGTGA

**N-HIS,T7-GO2-HIS**

*BamH*1(GGATCC)

*Xho*I(CTCGAG)

5` TCGCGGATCCCTGCCACACTACATCAGGAGCA

5` GGTGCTCGAGCTGCATGGAAGCATAATCTTCCA

**N-HIS,T7-GO2**

**N-HIS-GO2**

>AAF59929.2 glucose oxidase [Aspergillus niger]

MQTLLVSSLVVSLAAALPHYIRSNGIEASLLTDPKDVSGRTVDYIIAGGGLTGLTTAARLTENPNISVLV

IESGSYESDRGPIIEDLNAYGDIFGSSVDHAYETVELATNNQTALIRSGNGLGGSTLVNGGTWTRPHKAQ

VDSWETVFGNEGWNWDNVAAYSLQAERARAPNAKQIAAGHYFNASCHGVNGTVHAGPRDTGDDYSPIVKA

LMSAVEDRGVPTKKDFGCGDPHGVSMFPNTLHEDQVRSDAAREWLLPNYQRPNLQVLTGQYVGKVLLSQN

GTTPRAVGVEFGTHKGNTHNVYAKHEVLLAAGSAVSPTILEYSGIGMKSILEPLGIDTVVDLPVGLNLQD

QTTATVRSRITSAGAGQGQAAWFATFNETFGDYSEKAHELLNTKLEQWAEEAVARGGFHNTTALLIQYEN

YRDWIVNHNVAYSELFLDTAGVASFDVWDLLPFDRGYVHILDKDPYLHHFAYDPQYFLNELDLLGQAAAT

QLARNISNSGAMQTYFAGEILPGDNLAYDADLSAWTEYIPYHFRPNYHDVGTCSMMPKEMGSVVDNAARV

YGVRGLRVIDGSIPPTQMSSHVMTVFYAMALKISDAILEDYASMQ



