

icd

GCCTCCATCACTGTGAAGTGGCTACCCCGAAATGGCCGTCCACATGGGGAATTACTCAA
AGAAGCATTTGGCCATCCACCATATGGAGGAAGACGCCGCCACCAGAACTCTTAT
GGGAACTCCCGAGTACTCTTCCACGGGAGA**AAAGATCACACCAAG**TCGAGCTCGCGGG
mut: AGATCT
GACGATTATTACTGGATCGCCGGTGAAGCGGTGTGGTCACCAGCATTCGTCGATCCCT
CGTGAAGGAGAAGGGACTCGACCGATCTCAGGTGGCATTCATGGGCTACTGGAACATG
GAGTTTCTATGAAGGGATAAAAACCCACCCACACACGTCAGCAATGCGTGGAACCCCT
GTATTCTAGGTAGCT**G**AACAAAAGAGCCCATCAACCAAGGAGACT**ATG**GCCAAGATCATT
-10

gapB

GGTTTGGAAATCGGTGTCCCTCGCGCATTTTTCGGGCCGTATGCAAGGGGAGTGGAAC
CAGGTTCAACCGTTTCGAACGAGGGGTACCCCGTTGTACCCATATCTCAACCC**AAATGA**
mut: AG
TCACATCTTTGCGTAAGGCGGCAGGAAGTGCAGGGAACGGGATTACGCCACTGCCCTG
ATCT
GTAGGAGTCGGCCTGGAATCGATTGCGAAGGGTGGTGCAAAGCAGATACTGGAATCATT
AACACCTTCCGCTTTGGGC**TAATGT**TGGGG**G**GAGTGC'TTTCAACTATCCACGAGAGCC
-10
ACCCAGTGATAAACCCCGGGTTAACCCACGCCTAAGTCAGTGAAGGACTTTTTATGAC
GCACAACCACAAGGACTGGAACGATCGCATCGCAGTTGCGGAGGAC**ATG**GTGCCGTTGATC

pyk

TCAACACCATCGTCTCCGCAGTAGTGT'TTGCCGGCGCGATAATCGTGT'TC'TTCC'TGTTG
AAGAAGGGTAGGGAAACTCCCGAAGAGGTAGATCCGACT'TTCGCAGCGTCTGT'TGCAGC
AGATGCTGTAGCTTTCGCCAGATGGAAAACCC'TTGCCGAAAGCAGGGGAGGGCATTGATG
GAGAAACGCCCTCAACGCGATAGGTTTCAACCATAGGCC'TGACCTGGCTGAGATG'TTTT
TGGTAGAAAAACCGAGTGTCCGAATTG'TTTTGTGGGTGCCCGG'TTTTTTCTGATTTAAG
CACGTCAGAGGCGTAGAACATTGTCTGTCCACACTCTGGGTGCGAAGATTCATCGAGAA
TT**AAATGGTAGTACC**TGGCTTGGGGGGAATGACGTACTAGGCTT**ATG**GGCGTGGATAGA
mut: AGATCT

maeB

TATCAAGTGGGTATCGGTCTGGCGCGGCTCTTGCGCGATGGCTGTGGATGCCGATTGGGTGCTGGC
ACTTTGTGGATCATGGCTGGACTGTCATTGGCTTCCACGTGGTCTTGGCGCTGTGGTC
CCGCCCGTACTGAAGTAGCAGCCAAATTCAGCCACTGAATCAACCACTGAACCAAC
CCAAAACACCC**AAAAGTCACACTTAG**CAAACAATTAAATTCATCACAAAACACCCCT
mut1: AGATCT
GTACAAAATTAGCAATAAAGGTCAGGGGTGTTT'TGCAAATGTTACATTCGAAATTTT
TGT'TGAGCTACATATTTAGCTAGTGT'TT'TGTTCC**A**GAAACCTAAATGAGGT'TCTACCC
-10
TTAACAGAGCTTCCCGAAAAACACCGATTAACAAGGCTA**AAATGATATGACCATCG**ACCTG
mut2: CGCTTA