

Order No. **0714734** Map
 Customer **DSTL: Abigail Spear**
 Name of the gene **BTH_I3242**
 optimized for non-optimized



22.11.2007 16:12:30

SacII

KpnI NheI attB1-5'

1 GGGCGAATTGGGTACCGCTAGCACAGTTGTACAAAAAAGCAGGCTCCGGCGCCCC
 CCCGCTTAACCATGGCGATCGTGTCAAACATGTTTCGTCCGAGGCGCCGGGG

NotI

EagI

61 CTTGCCACCAGGCATCAGTTCTTCTCGTACACGCATATAGACGAGTCGCTGCGCAG
 GAACGGTGGTACCGTAGTCAAAAGAAAAGCATGTGCGTATATCTGCTCAGCGACCGCTG
 M_A_S_V_F_F_S_Y_T_H_I_D_E_S_L_R_D_

121 CAGCTCGAAATCCACCTCTCGTTATGAAGCGCGAGGGCCTCATTACCGCATGGCATGAC
 GTCGAGCTTAGGTGGAGAGCGAATACTCGCGTCCCGGAGTAATGGCGTACCGTACTG
 Q_L_E_I_H_L_S_L_M_K_R_E_G_L_I_T_A_W_H_D_

HinfI

181 CGCGCGATCGTCGAGGCTCCGACATCGATGACAGCATCGATGAGCACCTTGAGAGCGCA
 GCCGCGTAGCAGCGTCCGAGGCTGTAGCTACTGCGTAGCTACTCGTGGAACTCTCGCGT
 R_R_I_V_A_G_S_D_I_D_D_S_I_D_E_H_L_E_S_A_

ClaI

241 GACATCATCTTGTGCTAGTGAGCGCGAACATTGATCGCATCCGAGTACTGCTTCGCGACC
 CTGTAGTAGAACGACGATCACTCGCGTTGAAGTAGCGTAGGCTCATGACGAAGCGCTGG
 D_I_I_L_L_V_S_A_N_F_I_A_S_E_Y_C_F_A_T_

301 GAGATGAAGCGTGCAATGGAGCGTCATAAGGCTGGTGAGGTGCGCGTCATCCCCGTATC
 CTCTACTTCGACGTTACCTCGCAGTATTCCGACCAACTCCACGCGCAGTAGGGCAGTAG
 E_M_K_R_A_M_E_R_H_K_A_G_E_V_R_V_I_P_V_I_

ScaI

361 CTGCGCGTTGTGACTGGCACAGCGCCCGTCCGAAACTGAACGCAGTCCGACCGAT
 GACGCGCGAACACTGACCGTGTGCGGGCAAGCCTTTGACTTGCCTAAGGCTGGCTA
 L_R_A_C_D_W_H_S_A_P_F_G_K_L_N_A_V_P_T_D_

HaeII

BssHII

421 GGCGCGCCGGTGACCTCTTGGCCAACCAAGATGAGGCGTTGCCGACATCACGAAGTCG
 CCGGCCGGCCACTGGAGAACCGGGTTGGTCTACTCCGCAAACGGCTGTAGTGCTTCAGC
 G_R_P_V_T_S_W_P_N_Q_D_E_A_F_A_D_I_T_K_S_

HinfI

NarI
KasI
HaeII
HaeII
481 ATT CGC GCT GCT GTG AGT GCG ACC CGC GT CGT CAT CGG CGC GAG CGC GGG TT GC GG CG CC
-----+-----+-----+-----+-----+
TAAG CGC GAC GAC ACT CAC GCT GG CGA CG ACT AGC CG CT CG CG CC AAC GCG CG GC
I_R_A_A_V_S_A_T_A_S_S_S_A_R_A_R_V_A_A_P_

BssHII
SacII
541 GCG CGC GAG GCAG GGG CGGG CGCC CGC GAG TGG CAG TGCC CGC GAG TAC GCA ATT GCC G
-----+-----+-----+-----+-----+
CG CGC GCT CC CGT CCC CGCC CG CG TCAC CGT AC CGG CG CG CT AT CGT TAAC CGC
A_R_E_A_G_A_A_R_A_V_A_V_P_A_A_S_T_Q_L_P_

601 CGGT CTA GCA AAC AT GCG CGT CAA AAC AT CAG TT CT CGG ACT TT GG ACAG AGA TAC GTT GTT
-----+-----+-----+-----+-----+
GCC AGA TCG TT GTAC CG CGA GCT TGT AGT CAAG AGC CT GAAC CT GT CT AT GCAA ACAA
R_S_S_N_M_R_V_K_H_Q_F_S_D_L_D_R_D_T_F_V_

PflMI
BsmBI
661 TCG GAG AC GTT GACT TT AT CGCC CG TT CT CG AT GG CT CG CT CC AGG AG CT GG AAA AG
-----+-----+-----+-----+-----+
AGC CT CT GCAA ACT GAA AT AGC GGG CAA AGA AGC TAC CG AGC GAG GT CC TCG AC CCTT C
S_E_T_F_D_F_I_A_R_F_F_D_G_S_L_Q_E_L_E_K_

HinfI
BstNI
ClaI
BssHII
721 CGGC AC GG CC AG TT CC AG GG TC GAT TT ACC CGA AT CG AT GCG CG CC GTT CACT GCG AGC
-----+-----+-----+-----+-----+
GCC GTG CCG GT CAAG GT CC CAG CT AA AT GG GCT TAG CT ACC CG CG GCA AGT GAC GCT CG
R_H_G_Q_F_Q_G_R_F_T_R_I_D_A_R_R_F_T_A_S_

NarI
KasI
HaeII
BsmBI
HaeII
781 AT CT ACA AGG AC GG CA AG AGT AT CT CG CAG T GCG AG CGT CT CC AC GG CG CG CC TT CG GT
-----+-----+-----+-----+-----+
TAG AT GTT CCT GCG GTT CT CAT AG AG CG TC AC GT CG CAG AG GG GT GC CG CG CG AAG CCA
I_Y_K_D_G_K_S_I_S_Q_C_S_V_S_H_G_G_A_F_G_

841 GGG AGC AGC ACC CG CAG ATT AC GT ACT CC AGT CAG AT TCA AC GCA ACCA AC AG CT TC
-----+-----+-----+-----+-----+
CC CT CG TC GTT GG CG CT TA AT GC AT GAG GT CAG T CT AA AGT TG CG T AT GG TT GT CG AAG
G_S_S_N_R_E_I_T_Y_S_S_Q_I_S_T_H_T_N_S_F_

HaeII
HaeII
HinfI
901 AAC GAG GCG CT TAC CAT CG CG GA AG A TAG CC AG ACT CT GT AC CT AA AG CC GAT GAT GAA C
-----+-----+-----+-----+-----+
TT GCT CC CGC GA AT GG T AG CG C TT CT AT CG GT CT GAG AC AT GG AT TT CG G CT ACT ACT TG
N_E_A_L_T_I_A_E_D_S_Q_T_L_Y_L_K_P_M_M_N_

BstNI
961 AT GG CC AG GG GG AGT GT CC CG AA AG CT GT CT GAC ACC CG GAG CG CT GAG T AT CT GT GG T CA
-----+-----+-----+-----+-----+
TAC CG GT CC CG CT AC AGG CT TT CG AC AG ACT GT GG C CT CG CG GACT CAT AG AC ACC AGT
M_A_R_G_V_S_E_K_L_S_D_T_G_A_A_E_Y_L_W_S_

BssHII

AscI attB2-3'

ATGTTGATGGAACCCGTCCAGCGCAAGGGTGGCGCGCCGACCCAGCTTCTTGACAAA
 1021 -----+-----+-----+-----+-----+-----+
 TACAACACTACCTGGCAGGTGCGTCCCACCCGCGCGCTGGTCGAAAGAACATGTT
M_L_M_E_P_V_Q_R_K_G_G_R_A_D_P_A_F_L_Y_K_

SacII

XbaI ApaI BstBI

BsaI

GTGGTTGATCTAGAGGGCCCGCGGTTCGAAGGTAAGCCTATCCCTAACCTCTCCTCGGT
 1081 -----+-----+-----+-----+-----+-----+
 CACCAACTAGATCTCCCGGGGCCAAGCTTCCATTGGATAGGGATTGGGAGAGGAGCCA
V_V_D_L_E_G_P_R_F_E_G_K_P_I_P_N_P_L_L_G_

HinfI

BamHI SacI

CTCGATTCTACGTGATAATGAGGATCCGAGCTCCAGCTTTGTTCCC
 1141 -----+-----+-----+-----+-----+
 GAGCTAAGATGCCTATTACTCCTAGGCTCGAGGTCGAAAACAAGGG
L_D_S_T_*_*_*_