

QBP Original

ATG AAG TCT GTA TTA AAA GTT TCA CTG GCT
MKSVLKVSLA
GCA CTG ACC CTG GCT TTT GCG GTT TCT TCT
ALTLAFAVSS
CAT GCC GCG GAT AAA AAA TTA GTT GTC GCG
HAADKKLVVA
ACG GAT ACC GCC TTC GTT CCG TTT GAA TTT
TDTAFVPFEF
AAA CAG GGC GAT AAA TAT GTG GGC TTT GAC
KQGDKYVGFD
GTT GAT CTG TGG GCT GCC ATC GCT AAA GAG
VDLWAAIAKE
CTG AAG CTG GAT TAC GAA CTG AAG CCG ATG
LKLDYELKPM
GAT TTC AGT GGG ATC ATT CCG GCA CTG CAA
DESGIIPALQ
ACC AAA AAC GTC GAT CTG GCG CTG GCG GGC
TKNVDLALAG
ATT ACC ATC ACC GAC GAG CGT AAA AAA GCG
IITDERRKKA
ATC GAT TTC TCT GAC GGC TAC TAC AAA AGC
IDFSDGYYKS
GGC CTG TTA GTG ATG GTG AAA GCT AAC AAT
GLLVMVKANN
AAC GAT GTG AAA AGC GTG AAA GAT CTC GAC
NDVKSVKDLD
GGG AAA GTG GTT GCT GTG AAG AGC GGT ACT
GKVVAVKSGT
GGC TCC GTT GAT TAC GCG AAA GCA AAC ATC
GSVDYAKANI
AAA ACT AAA GAT CTG CGT CAG TTC CCG AAC
KTKDLRQFPN
ATC GAT AAC GCC TAT ATG GAA CTG GGC ACC
IDNAYMELGT
AAC CGC GCA GAC GCC GTT CTG CAC GAT ACG
NRADAVLHDT
CCA AAC ATT CTG TAC TTC ATC AAA ACC GCC
PNILYFIKTA

QBP Original

GGT AAC GGT CAG TTC AAA GCG GTA GGT GAC
GNGQFKAVGD
TCT CTG GAA GCG CAG CAA TAC GGT ATT GCG
SLEAQQYGIA
TTC CCG AAA GGT AGC GAC GAG CTG CGT GAC
FPKGSDELRD
AAA GTC AAC GGC GCG TTG AAA ACC CTG CGC
KVNGALKTLR
GAG AAC GGA ACT TAC AAC GAA ATC TAC AAA
ENGTYNEIYK
AAA TGG TTC GGT ACT GAA CCG AAA **TAA**
KWFGTEPK

MKSVLKVSLA ALTLAFVSS HAADKKLVVA TDTAFVPFEF KQGDKYVGFD
VDLWAAIAKE
LKLDYELKPM DFSGIIPALQ TKNVDLALAG ITITDERKKA IDFS DGYYKS
GLLMVKANN
NDVKS VKDLD GKV VAVKSGT GSVDYAKANI KTKDLRQFPN IDNAYMELGT
NRADAVLHDT
PNILYFIKTA GNGQFKAVGD SLEAQQYGIA FPKGSDELRD KVNGALKTLR
ENGTYNEIYK
KWFGTEPK

QBP		10 _I	13 _I	50 _I	70 _I	75 _I	115 _{II}	118 _{II}	156 _{II}	157 _{II}	185 _{II}
Lac	Wild-type	<u>D</u>	F	F	<u>I</u>	<u>R</u>	<u>K</u>	T	<u>H</u>	<u>D</u>	Y
	Q1(A)	D	<u>L</u>	<u>L</u>	<u>S</u>	<u>R</u>	K	T	<u>H</u>	<u>H</u>	<u>F</u>
	Q2(A)	D	<u>R</u>	<u>S</u>	<u>I</u>	<u>R</u>	K	<u>S</u>	H	<u>R</u>	<u>F</u>
	Q3(A)	D	<u>L</u>	<u>K</u>	<u>S</u>	<u>D</u>	<u>K</u>	T	H	<u>R</u>	<u>F</u>