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HindIII (468)

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CAAGTCTCCACCCCATTGACGTCAATGGGAGTTTGT TTTGGCACCAAATCAACGGGACTTTC  
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BamHI (866)

TTGACCTCCATAGAAGACACCGGGACCGATCCAGCCTGGGGATCCCGACc ATG GCT TCG  
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→

Met Ala Ser

TAC	CCC	TGC	CAT	CAA	CAC	GCG	TCT	GCG	TTC	GAC	CAG	GCT	GCG	CGT	TCT
ATG	GGG	ACG	GTA	GTT	GTG	CGC	AGA	CGC	AAG	CTG	GTC	CGA	CGC	GCA	AGA
▶ Tyr	Pro	Cys	His	Gln	His	Ala	Ser	Ala	Phe	Asp	Gln	Ala	Ala	Arg	Ser
CGC	GGC	CAT	AGC	AAC	CGA	CGT	ACG	GCG	TTG	CGC	CCT	CGC	CGG	CAG	CAA
GCG	CCG	GTA	TCG	TTG	GCT	GCA	TGC	CGC	AAC	GCG	GGA	GCG	GCC	GTC	GTT
▶ Arg	Gly	His	Ser	Asn	Arg	Arg	Thr	Ala	Leu	Arg	Pro	Arg	Arg	Gln	Gln

	GAA	GCC	ACG	GAA	GTC	CGC	CTG	GAG	CAG	AAA	ATG	CCC	ACG	CTA	CTG	CGG
	CTT	CGG	TGC	CTT	CAG	GCG	GAC	CTC	GTC	TTT	TAC	GGG	TGC	GAT	GAC	GCC
▶	Glu	Ala	Thr	Glu	Val	Arg	Leu	Glu	Gln	Lys	Met	Pro	Thr	Leu	Leu	Arg
	GTT	TAT	ATA	GAC	GGT	CCT	CAC	GGG	ATG	GGG	AAA	ACC	ACC	ACC	ACG	CAA
	CAA	ATA	TAT	CTG	CCA	GGA	GTG	CCC	TAC	CCC	TTT	TGG	TGG	TGG	TGC	GTT
▶	Val	Tyr	Ile	Asp	Gly	Pro	His	Gly	Met	Gly	Lys	Thr	Thr	Thr	Thr	Gln
	CTG	CTG	GTG	GCC	CTG	GGT	TCG	CGC	GAC	GAT	ATC	GTC	TAC	GTA	CCC	GAG
	GAC	GAC	CAC	CGG	GAC	CCA	AGC	GCG	CTG	CTA	TAG	CAG	ATG	CAT	GGG	CTC
▶	Leu	Leu	Val	Ala	Leu	Gly	Ser	Arg	Asp	Asp	Ile	Val	Tyr	Val	Pro	Glu
	CCG	ATG	ACT	TAC	TGG	CAG	GTG	CTG	GGG	GCT	TCC	GAG	ACA	ATC	GCG	AAC
	GGC	TAC	TGA	ATG	ACC	GTC	CAC	GAC	CCC	CGA	AGG	CTC	TGT	TAG	CGC	TTG
▶	Pro	Met	Thr	Tyr	Trp	Gln	Val	Leu	Gly	Ala	Ser	Glu	Thr	Ile	Ala	Asn
	ATC	TAC	ACC	ACA	CAA	CAC	CGC	CTC	GAC	CAG	GGT	GAG	ATA	TCG	GCC	GGG
	TAG	ATG	TGG	TGT	GTT	GTG	GCG	GAG	CTG	GTC	CCA	CTC	TAT	AGC	CGG	CCC
▶	Ile	Tyr	Thr	Thr	Gln	His	Arg	Leu	Asp	Gln	Gly	Glu	Ile	Ser	Ala	Gly
	GAC	GCG	GCG	GTG	GTA	ATG	ACA	AGC	GCC	CAG	ATA	ACA	ATG	GGC	ATG	CCT
	CTG	CGC	CGC	CAC	CAT	TAC	TGT	TCG	CGG	GTC	TAT	TGT	TAC	CCG	TAC	GGA
▶	Asp	Ala	Ala	Val	Val	Met	Thr	Ser	Ala	Gln	Ile	Thr	Met	Gly	Met	Pro
	TAT	GCC	GTG	ACC	GAC	GCC	GTT	CTG	GCT	CCT	CAT	ATC	GGG	GGG	GAG	GCT
	ATA	CGG	CAC	TGG	CTG	CGG	CAA	GAC	CGA	GGA	GTA	TAG	CCC	CCC	CTC	CGA
▶	Tyr	Ala	Val	Thr	Asp	Ala	Val	Leu	Ala	Pro	His	Ile	Gly	Gly	Glu	Ala
	GGG	AGC	TCA	CAT	GCC	CCG	CCC	CCG	GCC	CTC	ACC	CTC	ATC	TTC	GAC	CGC
	CCC	TCG	AGT	GTA	CGG	GGC	GGG	GGC	CGG	GAG	TGG	GAG	TAG	AAG	CTG	GCG
▶	Gly	Ser	Ser	His	Ala	Pro	Pro	Pro	Ala	Leu	Thr	Leu	Ile	Phe	Asp	Arg
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	GTA	GGG	TAG	CGG	CGG	GAG	GAC	ACG	ATG	GGC	CGG	CGC	GCT	ATG	GAA	TAC
▶	His	Pro	Ile	Ala	Ala	Leu	Leu	Cys	Tyr	Pro	Ala	Ala	Arg	Tyr	Leu	Met
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	CCG	TCG	TAC	TGG	GGG	GTC	CGG	CAC	GAC	CGC	AAG	CAC	CGG	GAG	TAG	GGC
▶	Gly	Ser	Met	Thr	Pro	Gln	Ala	Val	Leu	Ala	Phe	Val	Ala	Leu	Ile	Pro
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	GGC	TGG	AAC	GGG	CCG	TGT	TTG	TAG	CAC	AAC	CCC	CGG	GAA	GGC	CTC	CTG
▶	Pro	Thr	Leu	Pro	Gly	Thr	Asn	Ile	Val	Leu	Gly	Ala	Leu	Pro	Glu	Asp
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	TCT	GTG	TAG	CTG	GCG	GAC	CGG	TTT	GCG	GTC	GCG	GGG	CCG	CTC	GCC	GAA
▶	Arg	His	Ile	Asp	Arg	Leu	Ala	Lys	Arg	Gln	Arg	Pro	Gly	Glu	Arg	Leu
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	CTG	GAC	CGA	TAC	GAC	CGG	CGC	TAA	GCG	GCG	CAA	ATG	CCC	GAC	GAA	CGG
▶	Asp	Leu	Ala	Met	Leu	Ala	Ala	Ile	Arg	Arg	Val	Tyr	Gly	Leu	Leu	Ala
	AAT	ACG	GTG	CGG	TAT	CTG	CAG	GGC	GGC	GGG	TCG	TGG	CGG	GAG	GAT	TGG
	TTA	TGC	CAC	GCC	ATA	GAC	GTC	CCG	CCG	CCC	AGC	ACC	GCC	CTC	CTA	ACC
▶	Asn	Thr	Val	Arg	Tyr	Leu	Gln	Gly	Gly	Gly	Ser	Trp	Arg	Glu	Asp	Trp
	GGA	CAG	CTT	TCG	GGG	ACG	GCC	GTG	CCG	CCC	CAG	GGT	GCC	GAG	CCC	CAG
	CCT	GTC	GAA	AGC	CCC	TGC	CGG	CAC	GGC	GGG	GTC	CCA	CGG	CTC	GGG	GTC
▶	Gly	Gln	Leu	Ser	Gly	Thr	Ala	Val	Pro	Pro	Gln	Gly	Ala	Glu	Pro	Gln

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 TCG TTG CGC CCG GGT GCT GGG GTA TAG CCC CTG TGC AAT AAA TGG GAC  
 ▶ Ser Asn Ala Gly Pro Arg Pro His Ile Gly Asp Thr Leu Phe Thr Leu  
 TTT CGG GCC CCC GAG TTG CTG GCC CCC AAC GGC GAC CTG TAC AAC GTG  
 AAA GCC CGG GGG CTC AAC GAC CGG GGG TTG CCG CTG GAC ATG TTG CAC  
 ▶ Phe Arg Ala Pro Glu Leu Leu Ala Pro Asn Gly Asp Leu Tyr Asn Val  
 TTT GCC TGG GCC TTG GAC GTC TTG GCC AAA CGC CTC CGT CCC ATG CAC  
 AAA CGG ACC CGG AAC CTG CAG AAC CGG TTT GCG GAG GCA GGG TAC GTG  
 ▶ Phe Ala Trp Ala Leu Asp Val Leu Ala Lys Arg Leu Arg Pro Met His  
 GTC TTT ATC CTG GAT TAC GAC CAA TCG CCC GCC GGC TGC CGG GAC GCC  
 CAG AAA TAG GAC CTA ATG CTG GTT AGC GGG CGG CCG ACG GCC CTG CGG  
 ▶ Val Phe Ile Leu Asp Tyr Asp Gln Ser Pro Ala Gly Cys Arg Asp Ala  
 CTG CTG CAA CTT ACC TCC GGG ATG GTC CAG ACC CAC GTC ACC ACC CCC  
 GAC GAC GTT GAA TGG AGG CCC TAC CAG GTC TGG GTG CAG TGG TGG GGG  
 ▶ Leu Leu Gln Leu Thr Ser Gly Met Val Gln Thr His Val Thr Thr Pro  
 GGC TCC ATA CCG ACG ATC TGC GAC CTG GCG CGC ACG TTT GCC CGG GAG  
 CCG AGG TAT GGC TGC TAG ACG CTG GAC CGC GCG TGC AAA CGG GCC CTC  
 ▶ Gly Ser Ile Pro Thr Ile Cys Asp Leu Ala Arg Thr Phe Ala Arg Glu

BamHI (2008)

ATG GGG GAG GCT AAC TGA GGATCCACGTCACCTATTGTATACTCTATATTATACTCT  
 TAC CCC CTC CGA TTG ACT CCTAGGGTGCAGTGATAACATATGAGATATAATATGAGA  
 ▶ Met Gly Glu Ala Asn •••

ATGTTATACTCTGTAATCCTACTCAATAAACGTGTCACGCCTGTGAAACCGTACTAAGTCTCC  
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 GCACAGAAGAATAGTGGTAGTCCACTGTAGGAGCGGGTCCGACAGTTAGTACGGCCATAGCTA

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HindIII (229

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 CACACCGCCATTTGTATAATCCTTGGTCGGACACTACGACCTACACTGGCTCCTCGACTCCGG  
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CGTGTCTGGAACGCCGTTGGAGACTGCAGCCTCCGCCGCCGCTTCAGCCGCTGCAGCCACCGC  
GCACAGACCTTGCGGCAACCTCTGACGTCGGAGGCGGCGGCGAAGTCGGCGACGTCGGTGGCG  
r V a l S e r G l y T h r P r o L e u G l u T h r A l a A l a S e r A l a A l a A l a S e r A l a A l a A l a A l a T h r A l  
CCGCGGGATTGTGACTGACTTTTGCTTTCCTGAGCCCGCTTGCAAGCAGTGCAGCTTCCCGTTC  
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a A r g G l y l l e V a l T h r A s p P h e A l a P h e L e u S e r P r o L e u A l a S e r S e r A l a A l a S e r A r g S e  
ATCCGCCCGCGATGACAAGTTGACGGCTCTTTTGGCACAATTGGATTCTTTGACCCGGGAACT  
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r S e r A l a A r g A s p A s p L y s L e u T h r A l a L e u L e u A l a G l n L e u A s p S e r L e u T h r A r g G l u L e  
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u A s n V a l V a l S e r G l n G l n L e u L e u A s p L e u A r g G l n G l n V a l S e r A l a L e u L y s A l a S e r S e  
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CAGCAACTCCCAGGACACATAAAAAAGGTCCTGCACCATTTCCACTGAGACCTACAAGTCTAT  
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