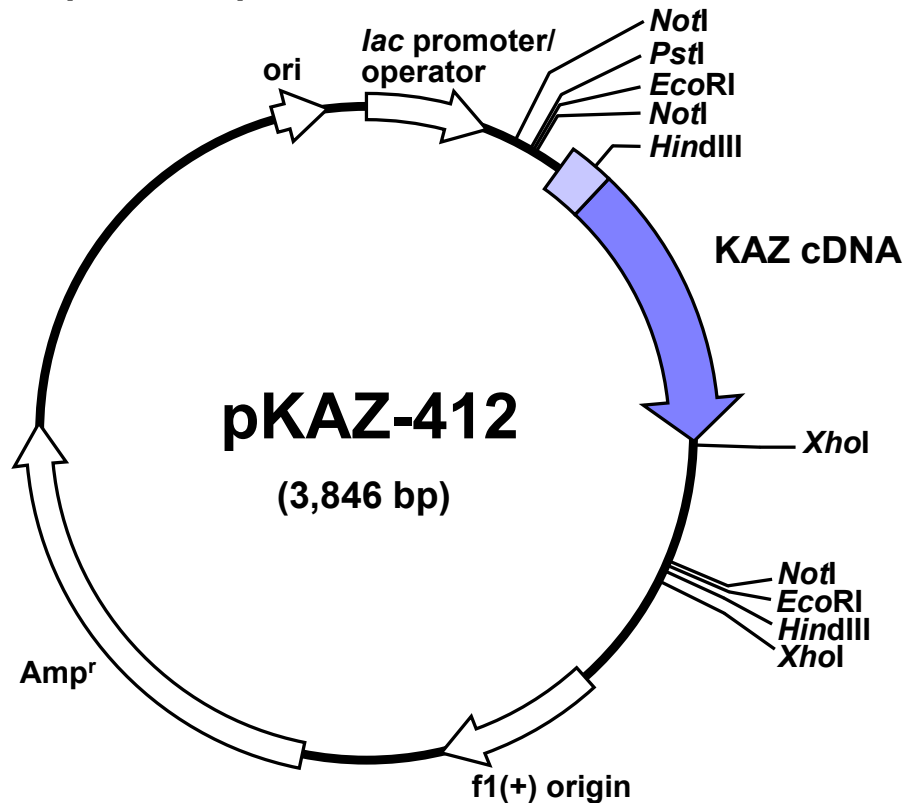


pKAZ-412	
Cat. No.	P-011
Gene/Insert name:	19 kDa protein of <i>Oplophorus</i> Luciferase (KAZ): catalytic component (<i>O. gracilorostris</i>)
Vector backbone:	pBluescript SK
Vector type:	<i>E. coli</i>
Backbone size w/o insert (bp):	2,958
Bacterial resistance:	Ampicillin
Growth strain:	JM83
Growth temperature (°C):	37
Growth instructions:	pKAZ-412 is resistant to ampicillin (50 µg/mL)
High or low copy:	High copy
Vector map:	pKAZ-412
Coding sequence:	Nucleotide sequence & Amino acid sequence
Plasmid sequence:	pKAZ-412 (3,846 bp)
Restriction enzyme list:	Restriction enzyme sites of pKAZ-412
GenBank Accession No.:	AB030246
Size:	10 µg
Terms and Licenses:	MTA
Laboratory Reagent For Research Use Only	

19 kDa Protein of *Oplophorus* Luciferase, KAZ

Cat. No. P-011

Name: pKAZ-412
Insert: 19 kDa protein of *Oplophorus* luciferase (KAZ) cDNA
 Catalytic component (*O. gracilorostris*)
Vector: pBluescript SK



• DNA fragment:

M A Y S --- I L A ***
 ATG-GCG-TAC-TCC-.....-ATT-CTT-GCC-TAA

• Feature for pKAZ-412:

Residue	Source	Comments
1-331	1-331	pBluescript SK backbone
1-230	1-230	<i>lac</i> promoter/operator
385-972	1-588	19 kDa protein ORF
1,214-3,846	326-2,958	pBluescript SK backbone
1,476-1,782	588-894	f1(+) origin
3,673	2,785	ori: Origin of replication
2,045-2,905	1,157-2,017	Amp ^r : Ampicillin resistance gene

Ref.

- 1) KAZ amino acid seq. & DNA seq.: GenBank Accession No. AB030246
 Inouye, S. *et al. FEBS Lett.* (2000) 481: 19-25.

Gene coding region (ORF: 19 kDa protein/KAZ)

Nucleotide sequence

GAATTCGCGGCCGCTGTTTGGGTTATAGGTGGTATATCATTAACTCTACTTTGAGAGAAG**ATGGCGTACTC**
CACTCTGTTTCATAATTGCATTGACCGCCGTTGTCACTCAAGCTTCCCTCAACTCAAAAAATCTAACCTAACT
TTTACGTTGGCAGATTTTCGTTGGAGACTGGCAACAGACAGCTGGATACAACCAAGATCAAGTGTTAGAAC
AAGGAGGATTGTCTAGTCTGTTCCAAGCCCTGGGAGTGTCAAGTACGCCCATACAGAAAGTTGTACTGTC
TGGGGAGAATGGGTAAAAAGCTGATATTCATGTCATAATACCTTACGAGGGACTCAGTGGTTTTCAAATG
GGTCTAATTGAAATGATCTTCAAAGTTGTTTACCCCGTGGATGATCATCATTTCAAGATTATTCCTCATT
ATGGTACACTCGTTATTGACGGTGTAAACCCCAACATGATTGACTACTTTTGGGAAGACCTTACCCCTGGAAT
TGCTGTATTTGACGGCAAGCAGATCACAGTTACTGGAACCTCTGTGGAACGGCAACAAGATCTATGATGAG
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GGAAAAATGTATAATACATATGATTTTTAGGACAGTTATTTTATTTAATTTGCTCACTTAAATTTAAATCTG
AAGACCACTATAACTGTTTCAGAAATGGAACCTGTAGTCAAACCTGTATTTAAATGCATTTAAAGATCTTATCATA
TGATTTAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAGCGGCCGCGAATTC

Amino acid sequence

*EK**MAYSTLFI**I**AL**TAVVT**QASSTQKSNL**TFTLAD**FVGDWQQ**TAGYNQDQVLE**QGG**LSSLFQALGVS**VTPI**
IQK**VVLS**GENGLKAD**I**H**VI**I**P**Y**E**GLSG**FQ**M**GL**I**EMI**FK**V**V**Y**P**V**DD**HH**FK**I**I**L**HY**G**TL**VI**D**G**VP**N**M**ID**Y**F**
GR**P**Y**P**GI**AV**F**D**G**K**Q**I**T**V**T**G**L**W**N**G**N**K**I**Y**D**E**R**L**I**N**P**D**G**S**L**L**F**R**V**T**I**N**G**V**T**G**W**R**L**C**E**N**I**L**A*

pKAZ-412 (3,846 bp)

GCGCCCAATACGCAAACC GCCTCTCCCCGCGCGTTGGCCGATTCATTAATGCAGCTGGCAGCAGAGTTT
CCCGACTGGAAAAGCGGGCAGTGAGCGCAACGCAATTAATGTGAGTTAGCTCACTCATTAGGCACCCCAGG
CTTTACACTTTATGCTTCCGGCTCGTATGTTGTGTGGAATTTGTGAGCGGATAACAATTTACACAGGAAA
CAGCTATGACCATGATTACGCCAAGCTCGAAATTAACCCCTACTAAAGGGAACAAAAGCTGGAGCTCCAC
CGCGGTGGCGGCCGCTCTAGAAGTAGTGATCCCCGGGCTGCAGGAATTCGCGGCCGCTGTTTGGGTTA
TAGGTGGTATATCATTAACCTACTTGTAGAGAAGATGGCGTACTCCACTCTGTTTCATAATTGCATTGACC
GCCGTTGTCACTCAAGCTTCCCTCAACTCAAAAATCTAACCTAACTTTTACGTTGGCAGATTTCCGTTGGAG
ACTGGCAACAGACAGCTGGATACAACCAAGATCAAGTGTTAGAACAAGGAGGATTGTCCTAGTCTGTTCCA
AGCCCTGGGAGTGTCACTCACGCCATACAGAAAAGTTGTACTGTCTGGGGAGAATGGGTTAAAAGCTGAT
ATTCATGTATAATACTTACGAGGGACTCAGTGGTTTTCAAATGGGTCTAAATGAAATGATCTTCAAAG
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ACAGTTACTGGAAGCTCTGTGGAACGGCAACAAGATCTATGATGAGAGGCTAATCAACCTGATGGTTTAC
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CGCCTGGTATCTTTATAGTCTGTGCGGGTTTCGCCACCTCTGACTTGAGCGTGCATTTTTTGTGATGCTCG
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CTTTTGTCTACATGTTCTTCTGCGTTATCCCTGATTTCTGTGGATAACCGTATTACCAGCTTTGAGTG
AGCTGATACCGCTCGCCGACCGGAACGACCGAGCGCAGCGAGTCACTGAGCGAGGAAGCGGAAGA

Residue	Source	Comments
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3,673	2,785	ori: Origin of replication
2,045-2,905	1,157-2,017	Amp ^r : Ampicillin resistance gene

Restriction enzyme sites of pKAZ-412

Enzyme Name	Sequence	Count	Cutting Positions
AccI	GT!MKAC	1	1243
ApaI	GGGCC!C	1	1261
Asp718I	G!GTACC	1	1263
BamHI	G!GATCC	1	309
BclI	T!GATCA	1	718
BglII	A!GATCT	2	873, 1154
EcoRI	G!AATTC	2	327, 1215
EcoRV	GAT!ATC	1	1223
HincII	GTY!RAC	1	1244
HindIII	A!AGCTT	2	435, 1227
KpnI	GGTAC!C	1	1267
MluI	A!CGCGT	0	-
NcoI	C!CATGG	0	-
NdeI	CA!TATG	2	1043, 1164
NheI	G!CTAGC	0	-
NotI	GC!GGCCGC	3	290, 334, 1208
PstI	CTGCA!G	1	325
SacI	GAGCT!C	1	277
SalI	G!TCGAC	1	1242
ScaI	AGT!ACT	1	2352
SmaI	CCC!GGG	1	317
StuI	AGG!CCT	0	-
XbaI	T!CTAGA	1	297
XhoI	C!TCGAG	2	984, 1248

Supplier	Contact us
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