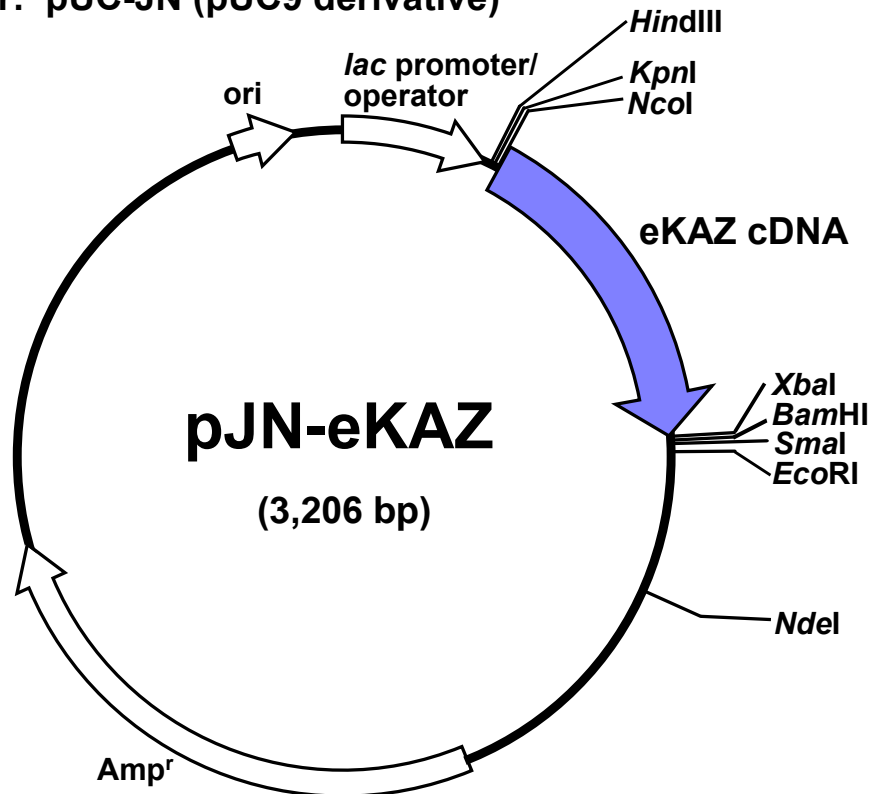


pJN-eKAZ	
Cat. No.	P-012
Gene/Insert name:	Enhanced 19 kDa protein of <i>Oplophorus</i> luciferase (eKAZ)
Vector backbone:	pUC-JN
Vector type:	<i>E. coli</i>
Backbone size w/o insert (bp):	2,680
Bacterial resistance:	Ampicillin
Growth strain:	JM83
Growth temperature (°C):	37
Growth instructions:	pJN-eKAZ is resistant to ampicillin (50 µg/mL)
High or low copy:	High copy
Vector map:	pJN-eKAZ
Coding sequence:	Nucleotide sequence & Amino acid sequence
Plasmid sequence:	pJN-eKAZ (3,206 bp)
Restriction enzyme list:	Restriction enzyme sites of pJN-eKAZ
GenBank Accession No.:	—
Size:	10 µg
Terms and Licenses:	MTA
Laboratory Reagent For Research Use Only	

Enhanced 19 kDa Protein of *Oplophorus* Luciferase, eKAZ

Cat. No. P-012

Name: pJN-eKAZ
Insert: Enhanced 19 kDa protein of *Oplophorus* luciferase cDNA
 (eKAZ: Three mutations of KAZ)
Vector: pUC-JN (pUC9 derivative)



• DNA fragment:

M V F T --- I L A ***
aagcttggtaccacc ATG-GTC-TTT-ACG-.....-ATT-GTT-GCC-TAA ttctaga
HindIII (Kozak) *XbaI*

• Feature for pJN-eKAZ:

Residue	Source	Comments
1-245	1-245	pUC-JN backbone (pUC9 derivative)
1-230	1-230	<i>lac</i> promoter/operator
255-767	1-513	eKAZ ORF
772-3,206	294-2,728	pUC-JN backbone (pUC9 derivative)
3,033	2,555	ori: Origin of replication
1,405-2,265	927-1,787	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.

2) eKAZ: Inouye, S. et al. *Biochem. Biophys. Res. Commun.* (2014) 445: 157-162.

Gene coding region (ORF: Enhanced 19 kDa protein/eKAZ)

Nucleotide sequence

AAGCTTGGTACCACC**ATGGTCTTTACGTTGGCAGATTTTCGTTGGAGACTGGCAACAGACAGCTGGATACA**
ACCAAGATCAAGTGTTAGAACAAGGAGGATTGTCTAGTCTGTTCCAAGCCCTGGGAGTGTTCAGTCACGCC
CATACAGAAAATAGTACTGTCTGGGGAGAATGGGTAAAA**ATC**GATATTCATGTCATAATACCTTACGAG
GGACTCAGTGGTTTTCAAATGGGTCTAATTGAAATGATCTTCAAAGTTGTTTACCCCGTGGATGATCATC
ATTTCAAGATTATTCTCCATTATGGTACACTCGTTATTGACGGTGTAAACACCCAACATGATTGACTACTT
TGGAAGACCTTACCCTGGAATTGCTGTATTTGACGGCAAGCAGATCACAGTTACTGGAACTCTGTGGAAC
GGCAACAAGATCATTGATGAGAGGCTAATCAACCCTGATGGTTCACCTCCTTCAGAGTTACTATCAATG
GAGTCACGGGATGGAGGCTTTGCGAGAACATTCTTGCCTAATTCTAGA

Amino acid sequence

KLGT**MVFTLAD**FVGDWQQTAGYNQDQVLEQGGLSSLFQALGVSVTPIQKIVLSGENGLKIDIHVIIPYE
GLSGFQMGLIEMIFKVVYPVDDHHFKIILHYGTLVIDGVTPNMIDYFGRPYPGIAVFDGKQITVTGTLWN
GNKIIDERLINPDGSLFRVTINGVTGWRLCENILA***F***

pJN-eKAZ (3,206 bp)

GCGCCCAATACGCAAACC GCCTCTCCCCGCGCGTTGGCCGATTCATTAATGCAGCTGGCAGCAGAGGTTT
 CCCGACTGGAAAAGCGGGCAGTGAGCGCAACGCAATTAATGTGAGTTAGCTCACTCATTAGGCACCCCAGG
 CTTTACACTTTATGCTTCCGGCTCGTATGTTGTGTGGAATTTGTGAGCGGATAACAATTTACACAGGAAA
 CAGCTATGACC**ATGATTACG**CCAAGCTGCAAGCTTGGTACCACC**ATGGTCTTTTACGTTGGCAGATTTTCGT**
TGGAGACTGGCAACAGACAGCTGGATAACAACCAAGATCAAGTGTTAGAACAAGGAGGATTGTCTAGTCTG
TTCCAAGCCCTGGGAGTGTCACTCACGCCCATACAGAAAATAGTACTGTCTGGGGAGAATGGGTAAAAA
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GGTGTAAACACCCAACATGATTGACTACTTTGGAAGACCTTACCCCTGGAATTTGCTGTATTTGACGGCAAGC
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TTCTAGAGGATCCCCGGGAATTTGCGGAATTTCCGCAATTTCACTGGCCGTCGTTTTTACAACGTCGTGACTGG
GAAAACCTTGCGTTACCCAACCTTAATCGCCTTGCAACATCCCCCTTTTCGCCAGCTGGCGTAATAGCG
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TTTTCTCCTTACGCATCTGTGCGTATTTTACACCCGATATGGTGCACCTCAGTACAATCTGCTCTGAT
GCCGCATAGTTAAGCCAGCCCCGACACCCGCAACACCCGCTGACGCGCCCTGACGGGCTTGTCTGCTCC
CGGCATCCGCTTACAGACAAGCTGTGACCGTCTCCGGGAGCTGCATGTGTGAGAGTTTTTACCCTCATC
ACCGAAAACGCGCAGACGAAAAGGGCTCGTGATACGCCATTTTTTATAGGTTAATGTCATGATAATAATG
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GGAGCCTATGGAAAAACGCCAGCAACGCGGCCTTTTTACGGTTCTTGGCCTTTTGTGCTGGCCTTTTGTCTA
CATGTTCTTTCTGCTTATCCCTGATTTCTGTGGATAACCGTATTACCAGCCTTTGAGTGGCTGATACC
GCTCGCCGACGCCGAACGACCGAGCGCAGCGAGTCACTGAGCGAGGAAGCGGAAGA

Residue	Source	Comments
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772-3,206	294-2,728	pUC-JN backbone(pUC9 derivative)
3,033	2,555	ori: Origin of replication
1,405-2,265	927-1,787	Amp ^r : Ampicillin resistance gene

Restriction enzyme sites of pJN-eKAZ

Enzyme Name	Sequence	Count	Cutting Positions
AccI	GT!MKAC	0	-
ApaI	GGGCC!C	0	-
Asp718I	G!GTACC	1	247
BamHI	G!GATCC	1	779
BclI	T!GATCA	1	513
BglII	A!GATCT	0	-
EcoRI	G!AATTC	1	797
EcoRV	GAT!ATC	0	-
HincII	GTY!RAC	0	-
HindIII	A!AGCTT	1	241
KpnI	GGTAC!C	1	251
MluI	A!CGCGT	0	-
NcoI	C!CATGG	1	254
NdeI	CA!TATG	1	1019
NheI	G!CTAGC	0	-
NotI	GC!GGCCGC	0	-
PstI	CTGCA!G	0	-
SacI	GAGCT!C	0	-
SalI	G!TCGAC	0	-
ScaI	AGT!ACT	2	395, 1712
SmaI	CCC!GGG	1	786
StuI	AGG!CCT	0	-
XbaI	T!CTAGA	1	773
XhoI	C!TCGAG	0	-

Supplier	Contact us
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