

<b>pJNC-eKAZ</b>	
<b>Cat. No.</b>	P-107
<b>Gene/Insert name:</b>	Enhanced 19 kDa protein of <i>Oplophorus</i> luciferase (eKAZ)
<b>Vector backbone:</b>	pCMV-JNC
<b>Vector type:</b>	Mammalian cells
<b>Backbone size w/o insert (bp):</b>	5,363
<b>Bacterial resistance:</b>	Ampicillin and neomycin
<b>Growth strain:</b>	JM83
<b>Growth temperature (°C):</b>	37
<b>Growth instructions:</b>	pJNC-eKAZ is resistant to ampicillin and neomycin
<b>High or low copy:</b>	High copy
<b>Vector map:</b>	<a href="#">pJNC-eKAZ</a>
<b>Coding sequence:</b>	<a href="#">Nucleotide sequence &amp; Amino acid sequence</a>
<b>Restriction enzyme list:</b>	<a href="#">Restriction enzyme sites of pJNC-eKAZ</a>
<b>GenBank Accession No.:</b>	—
<b>Size:</b>	10 µg
<b>Terms and Licenses:</b>	MTA
<b>Laboratory Reagent For Research Use Only</b>	

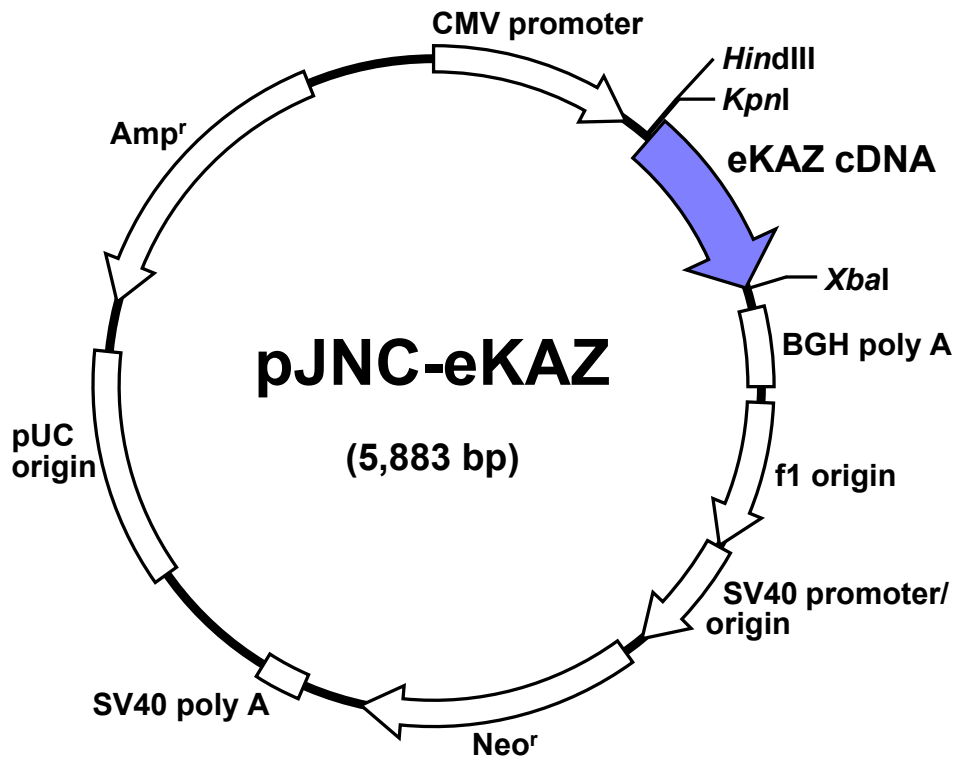
# Mammalian expression vector: Enhanced 19 kDa Protein of *Oplophorus* Luciferase

Cat. No. P-107

Name: pJNC-eKAZ

Insert: Enhanced 19 kDa protein of *Oplophorus* luciferase cDNA  
(eKAZ: Three mutations of KAZ)

Vector: pCMV-JNC



• Feature for pJNC-eKAZ:

Residue	Source	Comments
1-669	1-669	pCMV-JNC backbone
1-588	1-588	CMV promoter
632-651	632-651	T7 promoter
673-1,185	1-513	eKAZ ORF
1,190-5,883	752-5,445	pCMV-JNC backbone
1,206-1,223	768-785	Sp6 promoter
1,249-1,473	811-1,035	BGH polyadenylation sequence
1,519-1,947	1,081-1,509	f1 origin
1,952-2,295	1,514-1,857	SV40 early promoter and origin
2,357-3,151	1,919-2,713	Neomycin resistance gene (ORF)
3,325-3,455	2,887-3,017	SV40 early polyadenylation signal
3,838-4,511	3,400-4,073	pUC origin
4,656-5,516	4,218-5,078	Ampicillin resistance gene (ORF)

Ref.

1) Inouye, S. *et al. FEBS Lett.* (2000) 481: 19-25.

2) 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**  
**ACCAAGATCAAGTGTTAGAACAAAGGAGGATTGTCTAGTCTGTTCCAAGCCCTGGGAGTGTTCAGTCACGCC**  
**CATACAGAAA**ATAGTACTGTCTGGGGAGAAATGGGTAAAA**ATC**GATATTCATGTCATAATACCTTACGAG  
GGACTCAGTGGTTTTCAAATGGGTCTAATTGAAATGATCTTCAAAGTTGTTTACCCCGTGGATGATCATC  
ATTTCAAGATTATTCTCCATTATGGTACACTCGTTATTGACGGTGTAAACACCCAACATGATTGACTACTT  
TGGAAGACCTTACCCTGGAATTGCTGTATTTGACGGCAAGCAGATCACAGTTACTGGAACTCTGTGGAAC  
GGCAACAAGATCATTGATGAGAGGCTAATCAACCCTGATGGTTCACCTCCTTCAGAGTTACTATCAATG  
GAGTCACGGGATGGAGGCTTTGCGAGAACATTCTTGCC**TAAT**TCTAGA

**Amino acid sequence**

**MVFTLADFVGDWQQTAGYNQDQVLEQGGLSLFLQALGVSVTPIQK**IVLSGENGLKIDIHVIIPYEGLSGF  
QMGLIEMIFKVVPVDDHHFKIILHYGTLVIDGVTPNMIDYFGRPYPGIAVFDGKQITVTGTLWNGNKI  
DERLINPDGSL~~LLFRVTINGVTGWRLCENILA\*~~

**Restriction enzyme sites of pJNC-eKAZ**

Enzyme Name	Sequence	Count	Cutting Positions
AccI	GT!MKAC	3	3457, 3464, 5652
ApaI	GGGCC!C	1	1201
Asp718I	G!GTACC	1	665
BamHI	G!GATCC	0	-
BclI	T!GATCA	3	931, 1237, 2327
BglII	A!GATCT	1	5665
EcoRI	G!AATTC	0	-
EcoRV	GAT!ATC	0	-
HincII	GTY!RAC	3	4, 3465, 5653
HindIII	A!AGCTT	1	659
KpnI	GGTAC!C	1	669
MluI	A!CGCGT	0	-
NcoI	C!CATGG	4	380, 672, 2183, 2918
NdeI	CA!TATG	1	254
NheI	G!CTAGC	0	-
NotI	GC!GGCCGC	0	-
PstI	CTGCA!G	1	2539
SacI	GAGCT!C	2	588, 1233
SalI	G!TCGAC	2	3463, 5651
ScaI	AGT!ACT	2	813, 5210
SmaI	CCC!GGG	1	2299
StuI	AGG!CCT	1	2275
XbaI	T!CTAGA	1	1191
XhoI	C!TCGAG	0	-

Supplier	Contact us
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