

pJNC-hMMP2-GLuc	
Cat. No.	P-102
Gene/Insert name:	Human matrix metalloproteinase-2 (hMMP2) – <i>Gaussia</i> luciferase (GLuc)
Vector backbone:	pCMV-JNC
Vector type:	Mammalian cells
Backbone size w/o insert (bp):	5,376
Bacterial resistance:	Ampicillin and neomycin
Growth strain:	DH5α
Growth temperature (°C):	37
Growth instructions:	pJNC-hMMP2-GLuc is resistant to ampicillin and neomycin
High or low copy:	High copy
Vector map:	pJNC-hMMP2-GLuc
Coding sequence:	Nucleotide sequence & Amino acid sequence
Restriction enzyme list:	Restriction enzyme sites of pJNC-hMMP2-GLuc
GenBank Accession No.:	—
Size:	10 µg
Constituents:	10 mM Tris-HCl (pH 7.6) – 1 mM EDTA
Terms and Licenses:	MTA
Laboratory Reagent For Research Use Only	

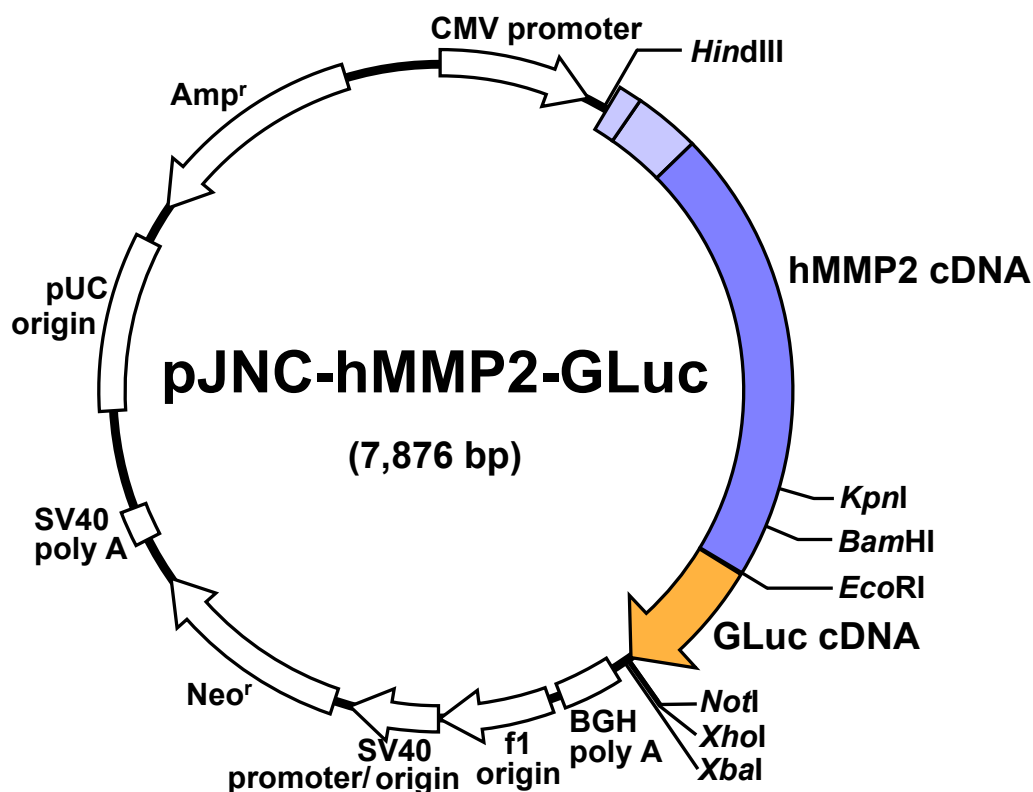
Mammalian expression vector: Matrix Metalloproteinase-2–*Gaussia* Luciferase

Cat. No. P-102

Name: pJNC-hMMP2-GLuc

Insert: Human matrix metalloproteinase-2 (hMMP2)
–*Gaussia* luciferase (GLuc) cDNAs

Vector: pCMV-JNC



• **Feature for pJNC-hMMP2-GLuc:**

Residue	Source	Comments
1-663	1-663	pCMV-JNC backbone
1-588	1-588	CMV promoter
632-651	632-651	T7 promoter
671-757	1-87	hMMP-2 signal peptide (M1-A29)
758-997	88-327	hMMP-2 propeptide (A30-Y110)
998-2,650	328-1,980	hMMP-2 (N111-C660)
2,657-3,160	1,987-2,490	GLuc (K18-D185)
3,164-7,876	733-5,445	pCMV-JNC backbone
3,199-3,216	768-785	Sp6 promoter
3,242-3,466	811-1,035	BGH polyadenylation sequence
3,512-3,940	1,081-1,509	f1 origin
3,945-4,288	1,514-1,857	SV40 early promoter and origin
4,350-5,144	1,919-2,713	Neomycin resistance gene (ORF)
5,318-5,448	2,887-3,017	SV40 early polyadenylation signal
5,831-6,504	3,400-4,073	pUC origin
6,649-7,509	4,218-5,078	Ampicillin resistance gene (ORF)

Ref.

1) Suzuki, T. *et al. PLoS One.* (2011) 6: e25243.

Gene coding region
(ORF: Human matrix metalloproteinase-2/hMMP-2-Gaussia luciferase/GLuc)

Nucleotide sequence

AAGCTTAGCCACC**ATGGAGGCGCTAATGGCCCGGGGCGCGCTACGGGTCCCCTGAGGGCGCTCTGTCTC**
CTGGGTGCGCTGCTGAGCCACGCCGCCGCCGCGCGCGTGCGCCATCATCAAGTTCCCGGCGATGTCGCC
CCTGTTTGTGCTGAAGGACACACTAAAGAAGATGCAGAAGTTCTTTGGACTGCCCCAGACAGGTGATCTT
GACCAGAATACCATCGAGACCATGCGGAAGCCACGCTGCGGCAACCCAGATGTGGCAACTACAATTCT
TCCCTCGCAAGCCCAAGTGGGACAAGAACCAGATCACATACAGGATCATTGGCTACACACCTGATCTGGA
CCCAGAGACAGTGGATGATGCCTTTGCTCGTGCCTTCCAAGTCTGGAGCGATGTGACCCCACTGCGGTTT
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CCTTTGACGGTAAGGACGGACTCCTGGCTCATGCCTTCGCCCCAGGCACTGGTGTGGGGGAGACTCCCA
TTTTGATGACGATGAGCTATGGACCTGGGAGAAGGCCAAGTGGTCCGTGTGAAGTATGGCAACGCCGAT
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GCGATGGCTTCTCTGGTGTCCACCACCTACAACTTTGAGAAGGATGGCAAGTACGGCTTCTGTCCCCA
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CTCAAAGGGCTTGCCAACGTGCAGTGTCTGACCTGCTCAAGAAGTGGCTGCCGCAACGCTGTGCGACCT
TTGCCAGCAAGATCCAGGGCCAGGTGGACAAGATCAAGGGGGCCGGTGGTGACTAAGCGGCCGC

Amino acid sequence

MEALMARGALTGPLRALCLLGCLLSHAAAAPSP**IIKFP****GDVAPKTDKELAVQYLNTFYGCPKESCNLFVL**
KDTLKKMQKFFGLPQTGDL**DQNTIETMRKPRC****GNPDVANYNFFPRKPKWDKNQITYRIIGYTPDLDPETV**
DDAFARAFQVWSDVTPLRFSRIHDGEADIMINFGRWEHGDGYFPDGDGLLAHAFAPGTGVGGDSHFDDD
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FFKGAYYLKLENQSLKSVKFGSIKSDWL**GCEFKPTENNEDFNIVAVASNFATDLDADRGKLP****GGKLP****LE**
VLKEMEANARKAGCTRGCLICLSHIKCTPKMKKFI**PGRCHTYEGDKESAQGGIGEAIVDIPEIPGFKDLE**
PMEQFIAQVDLCVDCTTGCLKGLANVQCSDLLKKWLPQRCATFASKIQGQVDKIKAGGD*

pJNC-hMMP2-GLuc (7,876 bp)

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 AAAATTTAAGCTACAACAAGGCAAGGCTTGACCGACAATTGCATGAAGAATCTGCTTAGGGTTAGGCGTT
 TTGCGCTGCTTCGCGATGTACGGGCCAGATATACGC

Residue	Source	Comments
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5,831-6,504	3,400-4,073	pUC origin
6,649-7,509	4,218-5,078	Ampicillin resistance gene (ORF)

Restriction enzyme sites of pJNC-hMMP2-GLuc

Enzyme Name	Sequence	Count	Cutting Positions
AccI	GT!MKAC	5	2239, 2944, 5450, 5457, 7645
ApaI	GGGCC!C	4	1928, 2058, 2188, 3194
Asp718I	G!GTACC	1	2323
BamHI	G!GATCC	1	2465
BclI	T!GATCA	3	1180, 3230, 4320
BglII	A!GATCT	3	2071, 2122, 7658
EcoRI	G!AATTC	1	2652
EcoRV	GAT!ATC	0	-
HincII	GTY!RAC	4	4, 2945, 5458, 7646
HindIII	A!AGCTT	1	659
KpnI	GGTAC!C	1	2327
MluI	A!CGCGT	0	-
NcoI	C!CATGG	8	380, 670, 1513, 1894, 2179, 2983, 4176, 4911
NdeI	CA!TATG	1	254
NheI	G!CTAGC	0	-
NotI	GC!GGCCGC	1	3166
PstI	CTGCA!G	2	2542, 4532
SacI	GAGCT!C	4	588, 2002, 2218, 3226
SalI	G!TCGAC	3	2943, 5456, 7644
ScaI	AGT!ACT	2	1365, 7203
SmaI	CCC!GGG	2	690, 4292
StuI	AGG!CCT	1	4268
XbaI	T!CTAGA	1	3184
XhoI	C!TCGAG	1	3172

Supplier	Contact us
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