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pJN-ZZ	
Cat. No.	P-015
Gene/Insert name:	ZZ domain
Vector backbone:	pUC-JN
Vector type:	*E. coli*
Backbone size w/o insert (bp):	2,662
Bacterial resistance:	Ampicillin
Growth strain:	JM83
Growth temperature (ºC):	37
Growth instructions:	pJN-ZZ is resistant to ampicillin (50 µg/mL)
High or low copy:	High copy
Vector map:	pJN-ZZ
Coding sequence:	Nucleotide sequence & Amino acid sequence
Plasmid sequence:	pJN-ZZ (3,079 bp)
Restriction enzyme list:	Restriction enzyme sites of pJN-ZZ
GenBank Accession No.:	―
Size:	10 µg (0.2 µg/µL)
Terms and Licenses:	MTA
Laboratory Reagent For Research Use Only	

コスモ・バイオ株式会社

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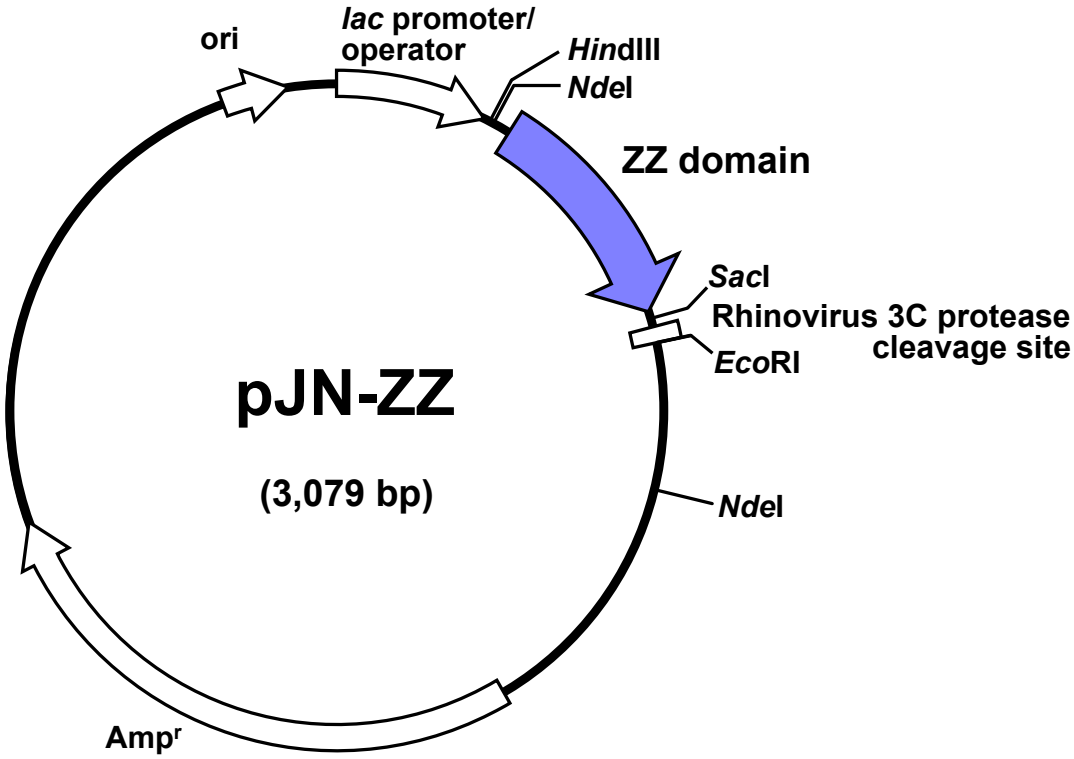
ZZ Domain (Synthetic IgG-Binding Domain)

Cat. No. P-015

Name: pJN-ZZ
Insert: ZZ domain
(Synthetic IgG-binding domain from Staphylococcal Protein A)
Vector: pUC-JN (pUC9 derivative)



- **Amino-terminal region of pJN-ZZ:**

```
 M   T   M   I   T   P   S   C   K   L   H   M   A   Q   H
ATG ACC ATG ATT ACG CCA AGC TGC AAG CTT CAT ATG GCG CAA CAC
                                HindIII  NdeI

 D   E   A   V   D   N   K   F   N  ...  Q   A   P   K   V
GAT GAA GCC GTG GAC AAC AAA TTC AAC ... CAG GCG CCG AAA GTA
                ZZ domain (116 a.a.)
                                        Rhinovirus 3C protease cleavage site
 D   A   N   S   S   S   G   S   L   E   V   L   F   Q ▼ G
GAC GCA AAT TCG AGC TCG GGA TCT CTG GAA GTT CTG TTC CAG GGG
            SacI

 P   E   F
CCC GAA TTC
      EcoRI
```


Ref.
1) Inouye, S. & Sahara, Y. *Biochem. Biophys. Res. Commun.* (2008) 376: 448-453.
2) Inouye, S. & Sahara, Y. *Protein Expr. Purif.* (2009) 66: 52-57.
3) Inouye, S. *et al*. *Biochem. Biophys. Res. Commun.* (2013) 437: 23-28.

Gene coding region
(ORF: ZZ domain, Rhinovirus 3C protease cleavage site)

Nucleotide sequence

ATGACCATGATTACGCCAAGCTGCAAGCTTCATATGGCGCAACACGATGAAGCCGTGGACAACAAATTCA
ACAAAGAACAACAAAACGCGTTCTATGAGATCTTACATTTACCTAACTTAAACGAAGAACAACGAAACGC
CTTCATCCAAAGTTTAAAAGATGACCCAAGCCAAAGCGCTAACCTTTTAGCAGAAGCTAAAAAGCTAAAT
GATGCTCAGGCGCCGAAAGTAGACAACAAATTCAACAAAGAACAACAAAACGCGTTCTATGAGATCTTAC
ATTTACCTAACTTAAACGAAGAACAACGAAACGCCTTCATCCAAAGTTTAAAAGATGACCCAAGCCAAAG
CGCTAACCTTTTAGCAGAAGCTAAAAAGCTAAATGATGCTCAGGCGCCGAAAGTAGACGCAAATTCGAGC
TCGGGATCT**CTGGAAGTTCTGTTCCAGGGGCCC**GAATTC

Amino acid sequence

MTMITPSCKLHMAQHDEAVDNKFNKEQQNAFYEILHLPNLNEEQRNAFIQSLKDDPSQSANLLAEAKKLN
DAQAPKVDNKFNKEQQNAFYEILHLPNLNEEQRNAFIQSLKDDPSQSANLLAEAKKLNDAQAPKVDANSS
SGS**LEVLFQGP**EF

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Cat. No. P-015

pJN-ZZ (3,079 bp)

GCGCCCAATACGCAAACCGCCTCTCCCCGCGCGTTGGCCGATTCATTAATGCAGCTGGCACGACAGGTTT
CCCGACTGGAAAGCGGGCAGTGAGCGCAACGCAATTAATGTGAGTTAGCTCACTCATTAGGCACCCCAGG
CTTTACACTTTATGCTTCCGGCTCGTATGTTGTGTGGAATTGTGAGCGGATAACAATTTCACACAGGAAA
CAGCT**ATG**ACCATGATTACGCCAAGCTGCAAGCTTCATATGGCGCAACACGATGAAGCCGTGGACAACAA
ATTCAACAAAGAACAACAAAACGCGTTCTATGAGATCTTACATTTACCTAACTTAAACGAAGAACAACGA
AACGCCTTCATCCAAAGTTTAAAAGATGACCCAAGCCAAAGCGCTAACCTTTTAGCAGAAGCTAAAAAGC
TAAATGATGCTCAGGCGCCGAAAGTAGACAACAAATTCAACAAAGAACAACAAAACGCGTTCTATGAGAT
CTTACATTTACCTAACTTAAACGAAGAACAACGAAACGCCTTCATCCAAAGTTTAAAAGATGACCCAAGC
CAAAGCGCTAACCTTTTAGCAGAAGCTAAAAAGCTAAATGATGCTCAGGCGCCGAAAGTAGACGCAAATT
CGAGCTCGGGATCT**CTGGAAGTTCTGTTCCAGGGGCCC**GAATTCCGCAATTCACTGGCCGTCGTTTTACA
ACGTCGTGACTGGGAAAACCCTGGCGTTACCCAACTTAATCGCCTTGCAGCACATCCCCCTTTCGCCAGC
TGGCGTAATAGCGAAGAGGCCCGCACCGATCGCCCTTCCCAACAGTTGCGCAGCCTGAATGGCGAATGGC
GCCTGATGCGGTATTTTCTCCTTACGCATCTGTGCGGTATTTCACACCGCATATGGTGCACTCTCAGTAC
AATCTGCTCTGATGCCGCATAGTTAAGCCAGCCCCGACACCCGCCAACACCCGCTGACGCGCCCTGACGG
GCTTGTCTGCTCCCGGCATCCGCTTACAGACAAGCTGTGACCGTCTCCGGGAGCTGCATGTGTCAGAGGT
TTTCACCGTCATCACCGAAACGCGCGAGACGAAAGGGCCTCGTGATACGCCTATTTTTATAGGTTAATGT
CATGATAATAATGGTTTCTTAGACGTCAGGTGGCACTTTTCGGGGAAATGTGCGCGGAACCCCTATTTGT
TTATTTTTCTAAATACATTCAAATATGTATCCGCTCATGAGACAATAACCCTGATAAATGCTTCAATAAT
ATTGAAAAAGGAAGAGTATGAGTATTCAACATTTCCGTGTCGCCCTTATTCCCTTTTTTGCGGCATTTTG
CCTTCCTGTTTTTGCTCACCCAGAAACGCTGGTGAAAGTAAAAGATGCTGAAGATCAGTTGGGTGCACGA
GTGGGTTACATCGAACTGGATCTCAACAGCGGTAAGATCCTTGAGAGTTTTCGCCCCGAAGAACGTTTTC
CAATGATGAGCACTTTTAAAGTTCTGCTATGTGGCGCGGTATTATCCCGTATTGACGCCGGGCAAGAGCA
ACTCGGTCGCCGCATACACTATTCTCAGAATGACTTGGTTGAGTACTCACCAGTCACAGAAAAGCATCTT
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TACTTCTGACAACGATCGGAGGACCGAAGGAGCTAACCGCTTTTTTGCACAACATGGGGGATCATGTAAC
TCGCCTTGATCGTTGGGAACCGGAGCTGAATGAAGCCATACCAAACGACGAGCGTGACACCACGATGCCT
GTAGCAATGGCAACAACGTTGCGCAAACTATTAACTGGCGAACTACTTACTCTAGCTTCCCGGCAACAAT
TAATAGACTGGATGGAGGCGGATAAAGTTGCAGGACCACTTCTGCGCTCGGCCCTTCCGGCTGGCTGGTT
TATTGCTGATAAATCTGGAGCCGGTGAGCGTGGGTCTCGCGGTATCATTGCAGCACTGGGGCCAGATGGT
AAGCCCTCCCGTATCGTAGTTATCTACACGACGGGGAGTCAGGCAACTATGGATGAACGAAATAGACAGA
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GATTGATTTAAAACTTCATTTTTAATTTAAAAGGATCTAGGTGAAGATCCTTTTTGATAATCTCATGACC
AAAATCCCTTAACGTGAGTTTTCGTTCCACTGAGCGTCAGACCCCGTAGAAAAGATCAAAGGATCTTCTT
GAGATCCTTTTTTTCTGCGCGTAATCTGCTGCTTGCAAACAAAAAAACCACCGCTACCAGCGGTGGTTTG
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ACTGTCCTTCTAGTGTAGCCGTAGTTAGGCCACCACTTCAAGAACTCTGTAGCACCGCCTACATACCTCG
CTCTGCTAATCCTGTTACCAGTGGCTGCTGCCAGTGGCGATAAGTCGTGTCTTACCGGGTTGGACTCAAG
ACGATAGTTACCGGATAAGGCGCAGCGGTCGGGCTGAACGGGGGGTTCGTGCACACAGCCCAGCTTGGAG
CGAACGACCTACACCGAACTGAGATACCTACAGCGTGAGCTATGAGAAAGCGCCACGCTTCCCGAAGGGA
GAAAGGCGGACAGGTATCCGGTAAGCGGCAGGGTCGGAACAGGAGAGCGCACGAGGGAGCTTCCAGGGGG
AAACGCCTGGTATCTTTATAGTCCTGTCGGGTTTCGCCACCTCTGACTTGAGCGTCGATTTTTGTGATGC
TCGTCAGGGGGGCGGAGCCTATGGAAAAACGCCAG**C**AACGCGGCCTTTTTACGGTTCCTGGCCTTTTGCT
GGCCTTTTGCTCACATGTTCTTTCCTGCGTTATCCCCTGATTCTGTGGATAACCGTATTACCGCCTTTGA
GTGAGCTGATACCGCTCGCCGCAGCCGAACGACCGAGCGCAGCGAGTCAGTGAGCGAGGAAGCGGAAGA

Residue	Sourse	Comments
1-251	1-251	pUC-JN backbone(pUC9 derivative)
1-230	1-230	*lac* promoter/operator
273-620	1-348	ZZ domain
645-668	1-24	Rhinovirus 3C protease cleavage site
669-3,079	318-2,728	pUC-JN backbone(pUC9 derivative)
2,906	2,555	ori: Origin of replication
1,278-2,138	927-1,787	Amp^r: Ampicillin resistance gene

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Cat. No. P-015

Restriction enzyme sites of pJN-ZZ

Enzyme Name	Sequence	Count	Cutting Positions
AccI	GT!MKAC	2	446, 620
ApaI	GGGCC!C	1	668
Asp718I	G!GTACC	0	-
BamHI	G!GATCC	0	-
BclI	T!GATCA	0	-
BglII	A!GATCT	2	314, 488
EcoRI	G!AATTC	1	670
EcoRV	GAT!ATC	0	-
HincII	GTY!RAC	0	-
HindIII	A!AGCTT	1	241
KpnI	GGTAC!C	0	-
MluI	A!CGCGT	2	302, 476
NcoI	C!CATGG	0	-
NdeI	CA!TATG	2	248, 892
NheI	G!CTAGC	0	-
NotI	GC!GGCCGC	0	-
PstI	CTGCA!G	0	-
SacI	GAGCT!C	1	637
SalI	G!TCGAC	0	-
ScaI	AGT!ACT	1	1585
SmaI	CCC!GGG	0	-
StuI	AGG!CCT	0	-
XbaI	T!CTAGA	0	-
XhoI	C!TCGAG	0	-

Supplier	Contact us
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