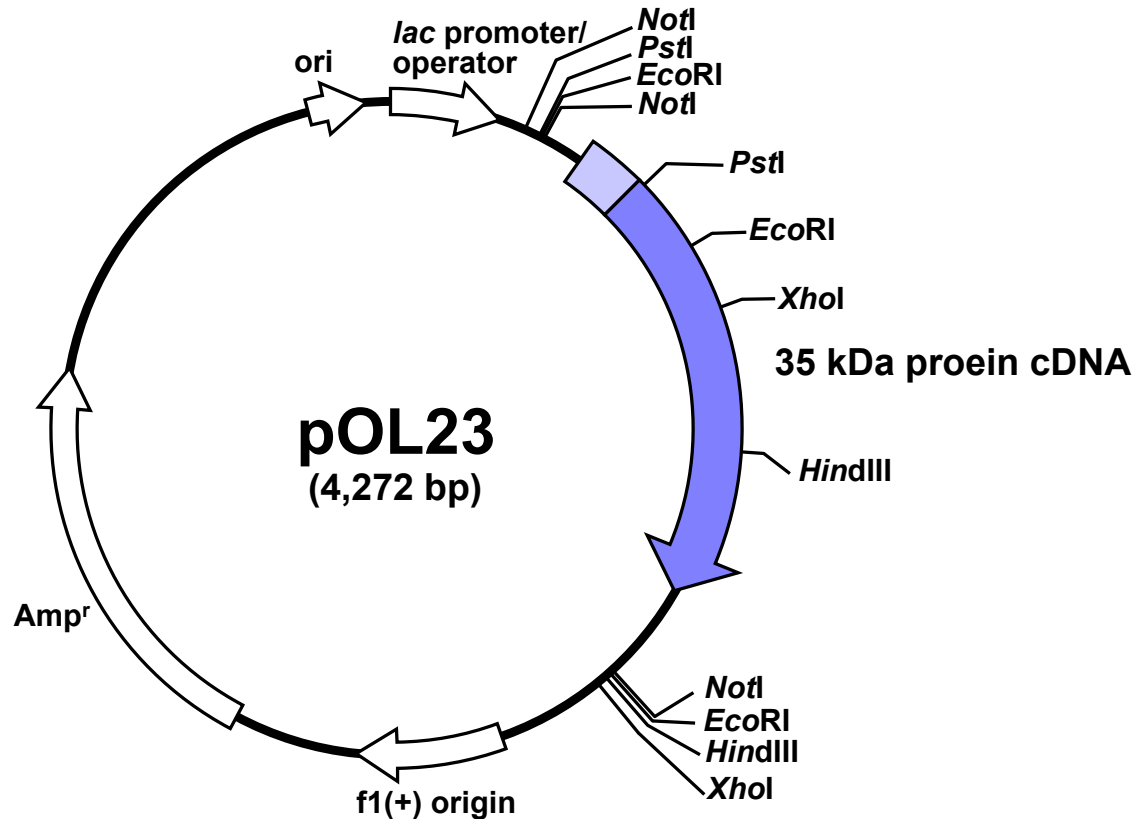


pOL23	
<b>Cat. No.</b>	P-013
<b>Gene/Insert name:</b>	35 kDa protein of <i>Oplophorus</i> luciferase: unknown function ( <i>O. gracilorostris</i> )
<b>Vector backbone:</b>	pBluescript SK
<b>Vector type:</b>	<i>E. coli</i>
<b>Backbone size w/o insert (bp):</b>	2,958
<b>Bacterial resistance:</b>	Ampicillin
<b>Growth strain:</b>	JM83
<b>Growth temperature (°C):</b>	37
<b>Growth instructions:</b>	pOL23 is resistant to ampicillin (50 µg/mL)
<b>High or low copy:</b>	High copy
<b>Vector map:</b>	<a href="#">pOL23</a>
<b>Coding sequence:</b>	<a href="#">Nucleotide sequence &amp; Amino acid sequence</a>
<b>Plasmid sequence:</b>	<a href="#">pOL23 (4,272 bp)</a>
<b>Restriction enzyme list:</b>	<a href="#">Restriction enzyme sites of pOL23</a>
<b>GenBank Accession No.:</b>	<a href="#">AB030245</a>
<b>Size:</b>	10 µg
<b>Terms and Licenses:</b>	MTA
Laboratory Reagent For Research Use Only	

# 35 kDa Protein of *Oplophorus* Luciferase

Cat. No. P-013

**Name:** pOL23  
**Insert:** 35 kDa protein of *Oplophorus* luciferase cDNA  
 Unknown function (*O. gracilorostris*)  
**Vector:** pBluescript SK



• DNA fragment:

M A V N --- M C Q \*\*\*  
 ATG-GCT-GTC-AAC-.....-GGC-AAA-AAT-TAA

• Feature for pOL23:

Residue	Source	Comments
1-331	1-331	pBluescript SK backbone
1-230	1-230	<i>lac</i> promoter/operator
418-1,418	1-1,001	35 kDa protein ORF
1,640-4,272	326-2,958	pBluescript SK backbone
1,902-2,208	588-894	f1(+) origin
4,099	2,785	ori: Origin of replication
2,471-3,331	1,157-2,017	Amp <sup>r</sup> : Ampicillin resistance gene

Ref.

- 1) 35 kDa protein amino acid seq. & DNA seq.: GenBank Accession No. AB030245  
 Inouye, S. *et al.* *FEBS Lett.* (2000) 481: 19-25.

**Gene coding region (ORF: 35 kDa protein of *Oplophorus* luciferase)**

**Nucleotide sequence**

GAATTCGCGGCCGCTAGCGTAGCTGCATCCTGGTGTTCGTCGACCCTCTCCAGCATCATCATCTGTGGAAG  
TTCGAAACATCTCGCAGAGCAAAA**ATGGCTGTCAACTTCAAGTTTAGCCTCCTTACCATAACCATTGTTGTT**  
**AATATCTTAGTCTATTGCAATGCATCAGCAATTA**AAATTCGATGTTGATTTGGAGAAGGTTCCCTCTAATG  
CTGTTGCCTGTCTGCAGCCGAAGATATTGCCCTTGACCTGCAAAGTGGGTGAAGGCGACGTTATGGA  
TATGGATTGCTCCAAAGTAACAAGTGACGCTGAACTTGCTTCCATATTTAGTAAAACGTTTCCCTCTAAC  
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CAACATTTACAAAAATCGCTATTACTAGTTGTACTCAATTGAAGACCATAGAAGAAAATGCTTTTTATGGC  
CAGTGTGCCCACTCGAGAAACTCGTGCTCTTAAAAATGATCTTTCCTCTTTTCCTTTTGAAGAAATG  
TCACAATACACAAAAATTAATTTGGCTTGAATTATCCGTAATAGCATTACAGGATGGCCAGCTCTCTCAT  
CGGATACACTAGCTAACCTTATTTTGTTCGGTAATCCTATTGGTAATATCCAGTTGATGCC'TTCCAGAC  
TCTTCTAATATCGAACAAATTCAACTGCTTCGATTGTAGCATCACCGAAGTGAAGCAGGTACT'TTTACT  
AGATACCAAAAATCCAAAAGCTTGTGTTAGGTTATAACGGTCTGACTAGCCTTCCCCTAGGCGCCATCA  
AACTCCATGGACATGGCCAACCACTTCCAAC'TTGGGTATCACCAATAATCAGATCATCAGTTTCCCCGA  
GGGTGCTGTTGAAGGCATCCAAGGCATCCTTGAATTGACTTTAATCGTGTAAACATCTCTAAGTGAGGAA  
GTGTGGCGACCAATTTTAGAAAAATCTTTTCCAATTCAGCTTGCTTAACAACCCACTAGCATGTGTATGTG  
ACGTAATGTGGCTTATTGATAGCCCAGAATTGCTGGCAAAAAAT**TAA**AGGCAATCCCCGATGTGCCGGTGG  
AAAAAGACTCAAGAATTTGGATCCAGCTGTTTCCATGCAATGTGCCAATAAGAAGAAGAAGAAGATTG  
AGTCTCCTGTATCTACTTCTGAAGAAGAAGAAGAAGAAATCATTAAAATAACAAC'TAATATTTTTTA  
AATATAAATCACAATGTATTTATACAGTGTAGTGGCAAATACAGTAGCGGCCGCGAATTC

**Amino acid sequence**

**MAVNFKFSLLTITIVVNILVYCNASAIKFDVDLEKVP**SNVACPAEEDIAPCTCKVGEQVMDMDCSKVT  
SDAELASIFSKTFPSNTFRELFIENREITTLTADSLGAATFTKIAITSCTQLKTIENAFMASAATLEK  
LVLLKNDLSSFPFEEMSQYTKLNWLELSVNSITGWPALSSDTLANLILFRNPIGNIPVDAFQTLPNIEQF  
NCFDCSITEVEAGTFTRSPKLQKLVLGYNGLTSLPVGAIKLHGHGPTTNSNLGITNNQIIISFPEGAVEGIQ  
GILGIDFNRVTSLSSEVWRPILLENLFQFSLNPLACVCDVMWLIDSPELLAKIKGNPRCAGGKRLKNDL  
PAVFHAMCQ\*

**pOL23 (4,272 bp)**

GCGCCCAATACGCAAACC GCCTCTCCCCGCGCGTTGGCCGATTCATTAATGCAGCTGGCAGCAGAGGTTT  
 CCCGACTGGAAAAGCGGGCAGTGAGCGCAACGCAATTAATGTGAGTTAGCTCACTCATTAGGCACCCCAGG  
 CTTTACACTTTATGCTTCCGGCTCGTATGTTGTGTGGAATTTGTGAGCGGATAACAATTTACACAGGAAA  
 CAGCTATGACCATGATTACGCCAAGCTCGAAATTAACCCCTACTAAAGGGAACAAAAGCTGGAGCTCCAC  
 CGCGGTGGCGGCCGCTCTAGAACTAGTGGATCCCCGGGCTGCAGGAATTCGCGGCCGCTAGCGTAGCTG  
 CATCCTGGTGTGCTCGACCCCTCCAGCATCATCATCTGTGGAAGTTCGAACATCTCGCAGAGCAAAAATG  
 GCTGTCAACTTCAAGTTTAGCCCTTACCATAACCATTGTTGTTAATATCTTAGTCTATTGCAATGCAT  
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 TAGTTGTACTCAATTGAAGACCATAGAAGAAAATGCTTTTATGGCCAGTGC TGCCACACTCGAGAAATC  
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 GTTCCGTAATCCTATTGGTAATATCCAGTTGATGCCCTCCAGACTCTTCCTAATATCGAACAAATTC AAC  
 TGCTTCGATTGTAGCATCACCGAAGTGAAGCAGGTACTTTTTACTAGATCACCAAAAC TCCAAAAGCTTG  
 TGTTAGGTTATAACGGTCTGACTAGCCTTCCCGTAGGCGCCATCAAAC TCCATGGACATGGCCCAACCAC  
 TTCAAACCTGGGTATCACCAATAATCAGATCATCAGTTTCCCGAGGGTGTGTTGAAGGCATCCAAGGC  
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 CTTGAGATCCTTTTTTTCTGCGGTAATCTGCTGCTTGC AAAACAAAAAACCACCGCTACCAGCGGTGGT  
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 TGAGTGAGCTGATACCGCTCGCCGCAGCCGAACGACCGAGCGCAGCGAGTCAGTGAGCGAGGAAGCGGAA  
 GA

Residue	Source	Comments
1-331	1-331	pBluescript SK backbone
1-230	1-230	lac promoter/operator
418-1,418	1-1,001	35 kDa protein ORF
1,640-4,272	326-2,958	pBluescript SK backbone
1,902-2,208	588-894	f1(+) origin
4,099	2,785	ori: Origin of replication
2,471-3,331	1,157-2,017	Amp <sup>r</sup> : Ampicillin resistance gene

**Restriction enzyme sites of pOL23**

Enzyme Name	Sequence	Count	Cutting Positions
AccI	GT!MKAC	2	365, 1669
ApaI	GGGCC!C	1	1687
Asp718I	G!GTACC	1	1689
BamHI	G!GATCC	2	309, 1465
BclI	T!GATCA	0	-
BglII	A!GATCT	0	-
EcoRI	G!AATTC	3	327, 698, 1641
EcoRV	GAT!ATC	1	1649
HincII	GTY!RAC	3	366, 427, 1670
HindIII	A!AGCTT	2	1115, 1653
KpnI	GGTAC!C	1	1693
MluI	A!CGCGT	0	-
NcoI	C!CATGG	1	1171
NdeI	CA!TATG	0	-
NheI	G!CTAGC	1	339
NotI	GC!GGCCGC	3	290, 334, 1634
PstI	CTGCA!G	2	325, 553
SacI	GAGCT!C	1	277
SalI	G!TCGAC	2	364, 1668
ScaI	AGT!ACT	1	2778
SmaI	CCC!GGG	1	317
StuI	AGG!CCT	0	-
XbaI	T!CTAGA	1	297
XhoI	C!TCGAG	2	830, 1674

Supplier	Contact us
<b>JNC CORPORATION</b> Shin Otemachi Bldg. 9F 2-2-1 Otemachi, Chiyoda-ku, Tokyo 100-8105 URL <a href="http://www.jnc-corp.co.jp">http://www.jnc-corp.co.jp</a>	<b>JNC Corporation, Yokohama Research Center</b> 5-1 Okawa, Kanazawa-ku, Yokohama, Japan 236-8605 Tel: 045-786-5501 Fax: 045-786-5511 E-mail: <a href="mailto:biophoton@jnc-corp.co.jp">biophoton@jnc-corp.co.jp</a>