

## Prílohy

5'GGTAACCATTTCTGCGGTATCTCCTGCTGGACGACAGAAACAAAAAGTCGCTGAAA  
GAGCTTGTGCATGAGGCAGATGAAGCGCTCTACAGCGCGAAACGGAGCGGGAAAAACCG  
CTTGATGATTCATGACTCAATAAAAATAAAAAAAGCCCAAAACGATATCAGTTTTGGGCTT  
TTATATTACTGCGCTAACGCTTTTTCTAGCGTTTCGGCAAATTGAGTTAAGTATTTTTTCATC  
AATTCGTCGAAACGGTTTTTCACTGGGCTGTCGATGTCCAAGACGCCGACAATTTTTCCG  
TCTACACGAATCGGAAGCACAATTTCTGATTGAGACGCTGCATCGCAGGCGATATGTCCC  
GGAAACGCGTTTACATCCTCAATACGTTCCACTTTTCCGTTTGCGTACGCTGTGCCGCAA  
CCCCTCTGCCGAAAGGAATCCGAACACATGCCGGCAGGCCTTGAACGGACCTAACACA  
AGCTGTCCATCCTCTTCTTTGGCAAATAGAAACCCGCCAGTTGACTTCAGGCAGCGAA  
TGATACAGCAGTGCTGAGGCATTTGCATAGTTAGCTATTTGGTCTGTTTCGTCTTCGGTCA  
TGGCTTCGAGCTGTTTTAGCAGAAGCTGATAGTCTTTTTCTTTATCTCCAGATTGTTTTTCG  
ACATGGAACATGGAAAACCCTCACTTTTTCTATAATATAAAACAAAGTCCGGCTTTTCTG  
CCGGCATTGTGCGATAAGTTCTTACAGGAACAGCGGCTTCTGCTTGAATAGTATCAAGA  
GGAAGGAGTGAGCCGT3'

**Obrázok S1: Bio-informaticky analyzovaný úsek sekvencie predchádzajúcej gén *refZ* o dĺžke 800 bp.**

**Tabuľka S1: Bio-informatickou analýzou identifikované promótorove motívy.**

Motív	<i>p</i> -hodnota	Sekvencia v smere 5' → 3'
$\sigma^H$	$5,49 \times 10^{-6}$	ACAGGAACAGCGGCTTTCTGCTTGAATAGTATCAAGAG
$\sigma^{F/G}$	$6,49 \times 10^{-5}$	AACATGGAAAACCCTCACTTTTTCTATAATATA

**Tabuľka S2: Bio-informatickou analýzou identifikované väzbové miesta Spo0A.**

Číslovanie od I.-XI. je v smere 5' → 3' v rámci sekvencie.

Číslo	<i>p</i> -hodnota	Sekvencia
I.	0.00373	TTCGGCA
II.	0.000971	CGTCGAA
III.	0.00453	TGTCCAA
IV.	0.000205	TGCCGCA
V.	0.000167	TGCCGAA
VI.	0.00533	ATCCGAA
VII.	0.00882	CTTGGAA
VIII.	0.00273	TTTGGCA
IX.	0.00233	TGAGGCA
X.	0.00486	TTTAGCA
XI.	0.00864	TTCGACA

5'GGTAACCATTTCTGCGGTATCTCCTGCTGGACGACAGAAACAAAAAGTCGCTGAAA  
GAGCTTGTGCATGAGGCAGATGAAGCGCTCTACAGCGCGAAACGGAGCGGGAAAAACCG  
CTTGATGATTCATGACTCAATAAAAATAAAAAAAGCCCAAAACGATATCAGTTTTGGGCTT  
TTATATTACTGCGCTAACGCTTTTTCTAGCGTTTCGGCAAATTGAGTTAAGTATTTTTTCATC  
AATTCGTCGAAACGGTTTTTCACTGGGCTGTCGATGTCCAAGACGCCGACAATTTTTCCG

TCTACACGAATCGGAAGCACAATTTCTGATTGAGACGCTGCATCGCAGGCGATATGTCCC  
 GGAAACGCGTTTACATCCTCAATACGTTCCACTTTTCCGTTTGCCTACGCTG**TGCCGCA**AA  
 CCCCTC**TGCCGAA**AGGA**ATCCGAA**CACATGCCGGCAGGC**CTTGGA**CGGACCTAACACA  
 AGCTGTCCATCCTCTTC**TTTGGCA**AAATAGAAACCCGCCAGTTGACTTCAGGCAGCGAA  
 TGATACAGCAGTGC**TGAGGCA**TTTGCATAGTTAGCTATTTGGTCTGTTTCGTCTTCGGTCA  
 TGGCTTCGAGCTGT**TTTAGCA**GAAAGCTGATAGTCTTTTTCTTTATCTCCAGATTGTTT**TTCG**  
**ACA**TGG**AACATGGAAAACCCCTCACTTTTCTATAATATA**AAACAAAGTTCGGGCTTTTCTG  
 CCGGCATTTGTCGATAAGTTCTT**ACAGGAACAGCGGCTTTCTGCTTGAATAGTATCAAGA**  
**G**GAAGGAGTGAGCCGT3'

**Obrázok S2: Lokalizácia identifikovaných promótorov a Spo0A väzbových miest v rámci analyzovanej sekvencie.** Červená znázorňuje lokalizáciu predpovedaného  $\sigma^H$  závislého promótoru. Zelená znázorňuje lokalizáciu predpovedaného  $\sigma^{F/G}$  závislého promótoru. Žltá znázorňuje lokalizáciu predpovedaných Spo0A väzbových miest.

**Tabuľka S3: Identifikované Spo0A väzbové miesta v rámci plazmidu pDG1664 vo vzdialenosti 1000 bp upstream od klonovacieho miesta EcoRI.**

Motív	Vlákno	Štart	Koniec	p-hodnota	Sekvencia
Spo0A	+	893	899	0.00851	TTCTTAA
Spo0A	+	922	928	0.00218	TTTGGAA
Spo0A	+	957	963	0.00626	TTTCAAA
Spo0A	+	981	987	0.00121	TGCGTAA
Spo0A	+	1054	1060	0.00328	TTTGTAA
Spo0A	+	1137	1143	0.00921	TTTGAGA
Spo0A	+	1214	1220	0.00115	TTCGTAA
Spo0A	+	1246	1252	0.00228	TTCGTCTG
Spo0A	+	1428	1434	0.00921	TGCTTAA
Spo0A	+	1458	1464	0.00626	TTTCAAA
Spo0A	+	1493	1499	0.00413	TTCTTCA
Spo0A	+	1567	1573	0.00706	TGCTGAA
Spo0A	+	1589	1595	0.00808	TTCCGCT
Spo0A	+	1696	1702	0.00152	TTTGAAA
Spo0A	+	1766	1772	0.00418	TTTGGCG

3'AATTCTTGAAGACGAAAGGGCCTCGTGATACGCCTATTTTTATAGGTTAATGTCATGAT  
 AATAATGGTTTCTTAGACGTCAGGTGGCACTTTTCGGGGAAATGTGCGCGGAACCCCTAT  
 TTGTTTATTTTTCTAAATACATTCAAATATGTATCCGCTCATGAGACAATAACCCTGATAA  
 ATGCTTCAATAATATTGAAAAAGGAAGAGTATGAGTATTCAACATTTCCGTGTCGCCCTT  
 ATCCCTTTTTTGCGGCATTTCCTTCTGTTTTTGGCTACCCAGAAACGCTGGTGAAGT  
 AAAAGATGCTGAAGATCAGTTGGGTGCACGAGTGGGTACATCGAACTGGATCTCAACA  
 GCGGTAAGATCCTTGAGAGTTTTCGCCCCGAAGAACGTTTTCCAATGATGAGCACTTTTA  
 AAGTTCTGCTATGTGGCGCGGTATTATCCCGTGTGACGCCGGCAAGAGCAACTCGGTC  
 GCCGCATACACTATTCTCAGAATGACTTGGTTGAGTACTCACCAGTCACAGAAAAGCATC  
 TTACGGATGGCATGACAGTAAGAGAATTATGCAGTGCTGCCATAACCATGAGTGATAACA  
 CTGCGGCCAACTTACTTCTGACAACGATCGGAGGACCGAAGGAGCTAACCGCTTTTTTGC  
 ACAACATGGGGGATCATGTAACCTGCCTTGATCGTTGGGAACCGGAGCTGAATGAAGCC

ATACCAAACGACGAGCGTGACACCACGATGCCTGCAGCAATGGCAACAACGTTGCGCAA  
ACTATTAECTGGCGAACTACTTACTCTAGCTTCCCGGCAACAATTAATAGACTGGATGGA  
GGCGGATAAAGTTGCAGGACCACTTCTGCGCTCGGCCCTTCCGGCTGGCTGGTTTATTGCT  
GATAAATCTGGAGCCGGTGAGCGTGGGTCTCGCGGTATCATTGCAGCACTGGGGCCAGAT  
GGTAAGCCCTCCCGTATCGTAGTTATCTACACGACGGGGAGTCAGGCAACTATGGATGAA  
CGAAATAGACAGATCGCTGAGATAGGTGCCTCACTGATTAAGCATTGGTAACTGTCAGAC  
CAAGTTTACTCATATATACTTTAGATTGATTTAAAACCTTCATTTTTTAATTTAAAAGGATCT  
AGGTGAAGATCCTTTTTGATAATCTCATGACCAAAAATCCCTTAACGTGAGTTTTCGTTCCA  
CTGAGCGTCAGACCCCGTAGAAAAGATCAAAGGATCTTCTTGAGATCCTTTTTTTCTGCGC  
GTAATCTGCTGCTTGCAAACAAAAAAACCACCGCTACCAGCGGTGGTTTGTGTTGCCGGAT  
CAAGAGCTATCAACTCTTTTTCCGAAGGTAACCTGGCTTCAGCAGAGCGCAGATACCAAAT  
ACTGTCCTTCTAGTGTAGCCGTAGTTAGGCCACCACTTCAAGAACTCTGTAGCACCGCCTA  
CATACCTCGCTCTGCTAATCCTGTTACCAGTGGCTGCTGCCAGTGGCGATAAGTCGTGTCT  
TACCGGGTTGGACTCAAGACGATAGTTACCGGATAAGGCGCAGCGGTCGGGCTGAACGG  
GGGGTTCGTGCACACAGCCAGCTTGGAGCGAACGACCTACACCGAACTGAGATACCTA  
CAGCGTGAGCTATGAGAAAGCGCCACGCTTCCCGAAGGGAGAAAGGCGGACAGGTATCC  
GGTAAGCGGCAGGGTCGGAACAGGAGAGCGCACGAGGGAGCTTCCAGGGGGAAACGCC  
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GGATACTTCCCGTCCGCCAGGGGGACATGCCGGCGATGCTGAAGGTCGCGCGCATTCCCG  
ATGAAGAGGCCGGTTACCGCTGTTTGAGGATATAGTAATCTTTCTAAATAGCTTTGGATT  
GGAGGAGTATGGCCACTAATACTAAGTTCAGCTAATAAAAAAATTTGCTAAAGAACTCCA  
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CTCTCCCGATAGCCTTTTTCTAGCTATATCCAGTAAAGTTACATGCTCTTTAGGTAAGA  
GGTATAGCCATTCTGCAGCGACATCTTTCGAGGTAATTTACCAGTAGTCACTGTTTGCC  
ACATTCGAGCTAGGGTTAAAATTACATTACGCTCATCACCTTTTATCCCCTCAATTAGTTC  
TGGCAAAGAATCCTTAATTGCTCTTCGAATATCTGTCAAAGGTACGGAGACAAGTATACT  
TGAAGAATCAGGACCAAATAGAGAAATACTATTCTTTCTTGCTTGCTAAAACAATAGC  
CAAATCAGGATCATAGCTTGGTTCCTGAATTTGTCCATTCTCAAATTCACCCCTGAGCCAC  
TCACCGTATATAAATTCTCTTTTTGGAGGATATTGCCAAGGGACAACCTCACTCCTATTTA  
TAACCGTAACTTCAAGTGGTCTAACAGAATCCGATTTCCAATCTTTCCTGATATAGTCAT  
TAGTCTTCTGTTAGTTTTTTTTCGAGTTAATTGAGGTAACTATGATTCACGACGACTAGA  
ACATCTACATCGCTGTTAATGCGTAAACCACCATTTACTGCTGAACCAAATAGATATACT  
CCAATAATTGAACTTCCAAATAAATCTTTTACGATTTTTAATGTTTGAATCGCTTGATTTG  
GTATTTTTCCGTTAATCAAATTGCTCATGATTTACCTCGTTGATTATGTTTCATATAAAGTT  
TATATTGATACTCAATTTACTTACCCTAGATTGGACATATACTTAAATTACTGTTCAATAA  
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TTTATTATACAGATCGATCCTCTAGACCTAGGCCTTAAGATCTGATCATATGCATCCGCGG  
GCCCCGGTTAACGCGTAATCCATGGATCAAGAGACAGGATGAGGATCGTTTCGCATGATT  
GAACAAGATGGATTGCACGCAGGTTCTCCGGTGCCCTGAATGAACTGCAGAAAGAGCTG  
GTAGTTGGCGCACTGTTTGAAGAACTGCCGATGTCCAGTAAGATTCTTACTATGCTGGTT  
GAACCGGATGCTGGTAAAGCTACTTGGGTTGCTGCTTCTACTTATGGTACCGATACAACCT  
ACTGGTGAGGAAGTTAAAGGAGCTCGAATTAATTCCGGCGACTGTTTCTGTTTCAGCCTC  
AAAAGACCATTTGTCGCTTTCAAAGACGGTCAGCTTCAAATATCTGCTGAGCGCCATTCC  
GACTGAATCAAAGCCGGGGCCTAGGTTAGCTGTGCTTCCGGGAACAGTGACAGAGAACA  
GCATGTCGGCTTCGTTTCATACACGGGCCGCTCCTTTTACATATTCAAGGATGCTGTCTTCA  
TCAGTCGGCAATGTGACAGGCTTGATTTCTGAAATGTCGACCGCTGTGTTCCGGATCTTTCA

GTCCGTTTCCTGTAAACACAGCTACGACCTTGCTGCCTTTCGGAATTTCTCCGGATTTAC  
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CGCTTCCCCCAGCTGTTTCGCACACTTCGATACAAATTCCCCGTAGGCGCTAGGGACCTCTT  
TAGCTCCTTGGAAGCTGTCAGTAGTATACCTAATAATTTATCTACATTCCCTTTAGTAACG  
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CCATTTTGAAACAAAGTACGTATATAGCTTCCAATATTTATCTGGAACATCTGTGGTATGG  
CGGGTAAGTTTTATTAAGACACTGTTTACTTTTGGTTTAGGATGAAAGCAATCCCGCTGGCA  
GCATAAGCAATGCTGAAATCGAGACTTGAGTGTGCAAGAGCAACCCTAGTGTTCGGTGAA  
TATCCAAGGTACGCTTGTAGAATCCCTTCTTCAACAATCAGATAGATGTCAGACGCATGGC  
TTTCAAAAACCACTTTTTTAATAATTTGTGTGCTTAAATGGTAAGGAATATTCCCAACAAT  
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CGAATGTTCAAGTTTTAATTTTCTGACGATAAGTTGAATAGATGACTGTCTAATTCAATAG  
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TCGTAAACGGTATCGGTTTCTTTAAATTCAATTGTTTTATTATTGGTTGAGTACTTTTTTC  
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CGTACATGACAGCTTGAGCGAGTTTTCCAAATGCAATTTTCCGTTCCGGGATGATGACAA  
TGCATTTTCATGTTAGCACGGGCTGCATATGCTGCCGCAGCAGCGGAAGTGTACCTGTTG  
ACGCGCACATAATCGTGTGCTTGCCTTCTTTTGCCTTTGCCACAGCCATAACCATCC  
GCGATCTTTAAATGATCCCGTAGGATTGACGCCTTCCGTTTTGACATGAAGCTCAATTCCG  
AGCTGCTCAGACAGCTTCGGCAGGTGAATAAGAGGTGTGTTTCTTTCATGTAAAGTTAGC  
GCCGGTGTGATCTGTTACAGGTAATAATTCTTTATATTGATGGATAAGTCTTTCCACA  
TTAGCTCCAACCGTTCCCTTCTACACGATATGTGCTTTTACTTCTTGAACGACTTCCAAA  
TCATTTAGTTTTGCAGGATATCACTGAAATCAGCTTCTGATGTATGATGTGTGACAATTA  
CGATTTTCAGCTAACTCATCATGGCCTTTAATTGGCAGCTGAAGGATTTTTTCAAACGTCAC  
GCCCGCTCTGAGAACACAGATGTAATTTTCGAGAATGAACCAACCTCATCTTTTACATG  
AATT5'

**Obrázok S3: Sekvencia plazmidu pDG1664 s identifikovanými Spo0A väzbovými miestami vo vzdialenosti 1000 bp *upstream* od klonovacieho miesta *EcoRI*. Zelená označuje klonovacie miesto *EcoRI*, šedá znázorňuje klonovacie miesto *BamHI*, žltá označuje Spo0A väzbové miesta v rámci plazmidu pDG1664 vo vzdialenosti 1000 bp *upstream* od klonovacieho miesta *EcoRI*.**

**Tabuľka S4: Identifikovaní interakční partneri RefZ.**

Proteín	<i>p</i> -hodnota (-Log <sub>10</sub> )	Nabohatenie (Log <sub>2</sub> )
<b>Sporulačné proteíny</b>		
YwqJ	1,945608536	1,973924319
YaaT	1,613081934	1,734054565
SpoIIAA	1,648672906	1,768267314
SpoIIQ	1,512054943	4,36001269
KinE	1,726417772	2,088194529
YngE	1,952479163	2,352497737
YngF	1,696805533	1,662032445
RefZ	3,077827852	5,582488378
SpoIIB	1,661440307	2,574265162
SpoVD	1,602567892	1,875427246
FtsX	3,649578274	3,480942408
<b>Proteíny delenia bunky</b>		
PbpC	5,038506748	1,576911926
DnaX	2,36658907	1,746816635
SsbA	2,516360067	1,504251798
MreBH	1,671330944	1,503787359
PlsX	2,277592107	1,573063533
IdcB	1,880362123	2,447872798
FtsZ	1,967780268	1,690290451
ParE	2,725295286	1,530884425
RecD2	3,870458234	6,59274133
SftA	1,815304273	2,081905365
RodZ	1,542626381	2,016452154
<b>Ostatné</b>		
YxbB	2,160551519	3,469198863
YgaC	1,79389436	2,956931432
YcsA	1,706252216	2,804034551
YjhA	1,966192547	2,54137516
YojO	2,472587272	2,522212346
YqaP	1,907056583	1,972800573
CinA	2,039796784	1,902838707
YfjR	2,913944782	1,81533432
YlbA	1,616365071	1,773347219
YlcD	2,776131815	1,542904536
YkaA	2,179672668	1,531305949
YhgD	1,800408681	2,281965892
YtoI	1,69885932	1,839091619
YkoM	2,206830188	1,659910838
RsbV	2,583214744	2,096862793
CheV	1,744686731	2,26219209
SigA	2,739187937	2,569355011
YtxH	3,198256824	3,445108414
SwrC	3,526290095	3,233291626

YtpB	1,740167607	1,608100255
McpA	1,789899028	1,879700343
YknX	1,734304013	2,002134323
SweD	2,814306698	2,849193255
LepA	1,599321725	1,866912842
AtpE	1,620778226	4,776761691
AtpH	2,901387031	2,301212947
AroA	1,734294459	2,751125654
DhbF	1,625950029	1,85432752
PapB	1,624722237	2,923126539
FadF	1,526615114	3,416084607
CheA	1,548251039	1,871162415
RqcU	2,102066355	2,178863525
PdhB	1,779003717	1,624186198
HepT	2,131464329	2,405576706
MtnU	1,824698523	2,137799263
Ffh	2,447897663	1,822397868
clpX	2,200502983	1,593395233
GroEL	3,914969634	3,5588576
YrbF	3,44228594	2,027873357
PurM	1,52515433	1,596975962
Pdp	2,631478935	3,617809931
CysL	2,926958061	1,990732193
YcbG	1,990849487	1,622110685
GmuR	1,523849195	1,623360952
GlpP	3,399578124	2,645687421
PurR	1,830035524	1,755737305
CymR	2,013126469	1,967816989
QoxA	2,621168311	4,132514318
QcrA	1,556323245	3,428596497
CtaE	1,826108874	3,275451342
RbsK	1,775396106	2,293658892
Era	1,683187955	1,569259644
RpsL	2,191407658	3,103469531
YpfD	1,84623328	1,643274943
YfiY	2,694762435	2,10007604
Pgk	2,204740791	1,684878031
PtsG	2,045729686	2,228039424
GltT	2,499723637	3,749705315
FecC	1,552907964	2,622346878
MetQ	2,319540189	1,81116422
BmrA	2,283845306	3,516537348
YknZ	1,572543984	1,98393631
RbsB	1,763855001	2,161996841
FhuD	2,113920483	3,311605771
SufC	1,543527333	2,681549072

NupN	1,731462785	2,706336975
MeIE	2,266201588	2,374683062
AppC	3,545477249	2,867902438