

Pro

# *Enterococcus faecalis*

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<i>Pro</i>	<i>E. faecalis.</i>
<i>in vitro</i>	-
<i>Pro</i>	-
<i>in vitro,</i>	-

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• - , *in vitro*

• - , - , - , -

• - *in vivo.*

• - *in vivo* ( , - , - )

lpp- [1] - *in vitro.*

[2].

• - , 7, -

• - , - , -

• - 5'- *Pro* -

• - 7- *Pro* [3].

	[4]	[5-7].	DH5 ,	[14],	<i>E. coli</i>
5'-			<i>Bst</i> NI,		
5'-	[8,9],		<i>in vitro</i>		7
e			-HCl, 8,0, 30	MgCl <sub>2</sub> , 5	100
( ):		[10]	4		
	[11].		0,5	1 8	
Pro	<i>E. faecalis</i> .		Toyopearl 650M (	1 )	DEAE-
			10	-HCl, 8,0, 10	MgCl <sub>2</sub> .
				20	
				1	NaCl.
	<i>E. faecalis</i> -				
[12, 13].			20	-HCl, pH 7,5, 30	MgCl <sub>2</sub> ,
<i>Escherichia coli</i>	DH5 ( <i>F</i> <sup>-</sup> 80 <i>dlacZ</i>			4	/
<i>M15 (lacZYA-argF)U169 deoR, recA1 endA1</i>				95 °	30
<i>hsdR17(r<sub>k</sub><sup>-</sup> m<sub>k</sub><sup>+</sup> phoA supE44 thi-1 gyrA96 relA1)</i>			<i>t</i> = 60 °	9	
«Life Technologies» ( ),				<i>t</i> = 70 °	3
( ),					70
«Q-BIOgen» ( ),					
( ),	DEAE-Toyopearl 650M				0,73
«Toyo Soda» ( ),	ProSwift	57 °			1 /
Monolith WAX-1S	«Dionex» ( ),			250	
( ),	«Amersham»			(50	-HCl, pH7,5, 4
«Whatman» ( )		10 %-		)	MgCl <sub>2</sub> ,
<i>in vitro</i> .	<i>Pro E. faecalis</i>			NaCl 0,2	1
<i>calis,</i>	<i>Pro E. fae-</i>				
7-			130	100	-HCl, pH 8,0, 20
	<i>pUC18</i>		MgCl <sub>2</sub> , 0,5	/	, 3
<i>Bam</i> HI <i>Eco</i> RI ( . 1).			20	14	(268 / );
			1	Pro 50	

a

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PEFokA2 AGCTTGCATGCCTGCAGGTCGACTCTA
PEFokA1 ACGTACGGACGTCCAGCTGAGATCCTACCTCCTAG

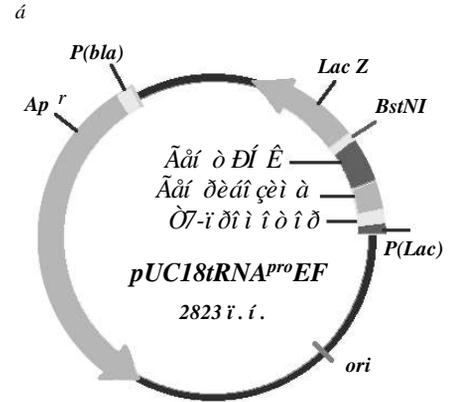
PE10Fok GGATGGAGGATCCTGGTCGGGAAGACAGGATT
PE5 GACCAGCCCTTCTGTCTTAAGCTTGGACGG

PE9 CGAACCTGCGACCCCTTGGTCCCAAACCAAGT
PE4 TGGGGAACCAGGGTTTGGTTCACGAGATGGTTC

PE8 GCTCTACCAAGCTGAGCTACTTCCAGGACGG
PE3 GACTCGATGAAGGGCTGCCATGGCCCATGG

PE7 TACCGGGTACCGTTTTCGCTCCTCACGGACTCAT
PE2 CAAAGCAGGAGTGCCTGAGTAGTCGCCCTTCAG

PE6 CAGCGGGAAGTCTCCCTATAGTGAGTCGTATTAG
PE1 AGGGATATCACTCAGCATAATCTTAA
    
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a

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AATTCTAATACGACTCACTATAGGGAGACTTCCCGCTGATGAGTCCGTGAGGACGAAACGGTACCCGGTA
CATTATGCTGAGTGATATCCCTCTGAAGGGCGACTACTCAGGCACTCCTGCTTTGCCATGGGCCAT
    07-i ði i ð i ð  Āāí ðèáí çèì à

CCGTCCGGGAAGTAGCTCAGCTTGGTAGAGCACTTGGTTTTGGGACCAAGGGGTCGCAGGTTCGAATCCTG
GGCAGGCCCTTCATCGAGTCGAACCATCTCGTGAACCAAACCTGGTTCCCGAGCGTCCAAGCTTAGGAC
    Āāí ò ĐÍ Ê

TCTTCCCGACC*AGGATCCTCCATCCTAGAGTCGACCTGCAGGCATGCA
AGAAGGGCTGGT*CCTAGGAGGTAGGATCTCAGCTGGACGTCCGTACGTTTCCA
    BstNI
    
```

. 1. - Pro *E. faecalis* in vitro: -

*pUC18*; - ; - , -

*E. faecalis*. 37° ad) -

20 , (tobacco ringspot virus) [9], -

10 %- 7- -

200 , -

50 5 %- , -

Pro *E. faecalis* 1, ) Pro *E. faecalis* in vitro ( 7- -

5'- , -

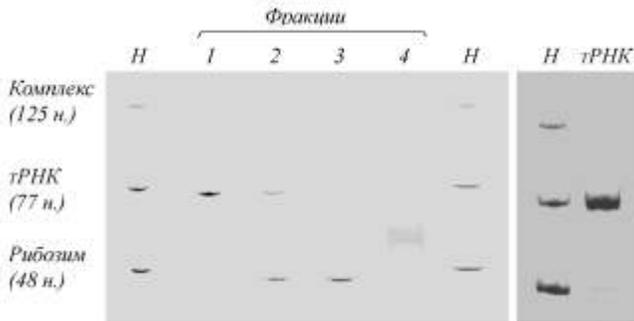
3'- -

e - 7. - BstNI, -

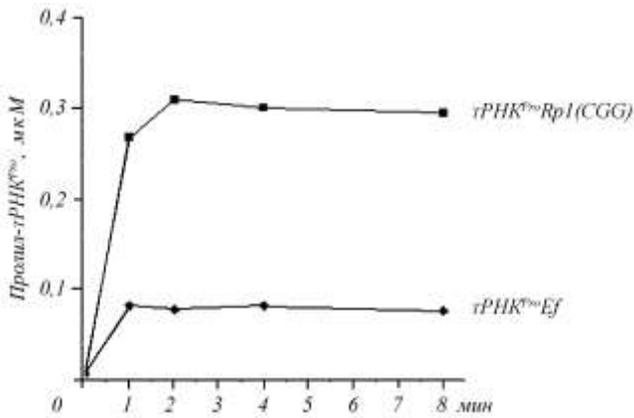
7- 5'- -

(hammerhe- ( . 1, ). -





4. *E. faecalis* Pro  
 »); 1 - Pro; 2 - Pro + ; 3 - ; 4 -  
 WAX-1S DEAE-«Dionex»



5. *E. faecalis* Pro 1  
*Rhodopseudomonas palustris* (CGG), *in vivo*

WAX-1S, DEAE- NaCl

(. 3, 4). 0,8 (. 5).

*in vivo*,

Pro [15].

95 % (. 4).

DEAE-«Dionex»

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Cloning, expression and purification of tRNA<sup>Pro</sup> from bacteria *Enterococcus faecalis*

Summary

**Aim.** To elaborate the method of expression and purification of bacteria *Enterococcus faecalis* tRNA<sup>Pro</sup> transcript. **Methods.** tRNA, co-expressed in vitro with cis-hydrolytical ribozyme, was purified by high performance liquid chromatography using anion-exchange chromatographic column. **Results.** A satisfactory yield of high purity preparation was obtained. A transcript of tRNA<sup>Pro</sup> exhibits acceptor activity in aminoacylation reaction. **Conclusions.** The method developed may be introduced in laboratory practice including the obtaining of other tRNAs.

**Keywords:** tRNA, transcript, gene expression in vitro, high performance liquid chromatography.

*Enterococcus faecalis*

*in vitro*

*Pro*

*E. faecalis.*

*in*

*Pro*

*in vitro,*

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