



() -

Multiplex-PCR

۵

*

۵

: _____

.

.

:

16S rRNA

(Multiplex-PCR)

PCR

.

.

PCR

.

PCR

.

DNA

: _____

.

.

Multiplex-PCR

:

/ / :

- / / :

*

Email: s_farshad@yahoo.com

- :

- :

(H. Pylori)

.(-)

(Brain Heart Infusion broth)

.()

()

(-)

PCR

.()

(=)

.(=)

.()

DNA

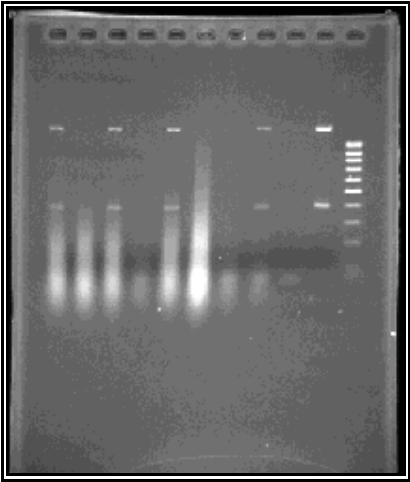
PCR

.()

B

PCR

/									
DNA					.()				
PCR									
DNA									
					DNA				
					:				
PCR					/				
					Tris-HCl 20mM [PH , 8], EDTA-)				
					(N2 2mM, Triton-X100 1.2%				
					()				
PCR									
Multiplex-PCR									
					() K				
S rRNA									
5'-GTA AAG GCT CAC CAA GGC TAT-3'									
5'-CCA CCT ACC TCT CCC ACA CTC-3'									
.() bp-									
					.()				
H. pylori					:				
5'-TCA CAT GTT TTC AAT CAT CAC GC-3'					PBS -				
5'-ATG GCT TAC AAC CCT AAA ATT					/ - / PH				
TTA CAA AAG CC-3'									
PCR .() bp-					SDS %)				
μl pmol					mM [PH] EDTA mM NaCl mM				
TagDNA					/ (Tris-HCl				
mM					K				
PCR									
					.()				
DNA									

/		/	
		/	PCR
		PCR	pb-
		DNA	
Multiplex-PCR			
/	bp	bp	
		/	
DNA			
PCR	.()	)	DNA
		Multiplex-PCR (- -	
(bp-) S rRNA	:		DNA
:	(bp -)		
()	()		
()	()	()	
.()	()		
			
		bp-	
		bp-	
Multiplex-PCR			
		DNA	
(Salmonella typhi)	:		
	(E. coli)		
	(Streptococcus viridans)		
	(Proteus mirabilis)		
	(Haemophilus influenza)		
(Shigella sp)	(Campylobacter sp)		
	(Klebsiella sp)		
	(Enterobacter sp)		
		PCR	
		/	
DNA			
		DNA	PCR
PCR		PCR	

DNA

DNA

References:

1. Marshall BJ, Warren JR. Unidentified curved bacilli in the stomach of patients with gastric and peptic ulceration. *Lancet* 1984; 1: 1311-4.
2. Cover TL, Blaser MJ. *Helicobacter pylori* and gastroduodenal disease. *Annu Rev Med* 1992; 43: 135-45.
3. McGowan CC, Cover TL, Blaser MJ. *Helicobacter pylori* and gastric acid: biological and therapeutic implications. *Gastroenterology* 1996; 110: 926-38.
4. Fox JG, Dewhirst FE, Shen Z, et al. Hepatic *Helicobacter* species identified in bile and gallbladder tissue from Chileans with chronic cholecystitis. *Gastroenterology* 1998; 114: 755-63.
5. Roe IH, Kim JT, Lee H, Lee JH. Detection of *Helicobacter* DNA in Bile from Bile Duct Disease. *J Korean Med Sci* 1998; 14: 182-6.
6. Kawaguchi M, Saito T, Ohno H, et al. Bacteria closely resembling *Helicobacter pylori* detected immunohistologically and genetically in resected gallbladder mucosa. *J. Gastroenterol.* 1996; 31: 294-8.
7. Lin TT, Yeh CT, Wu CS, et al. Detection and partial sequence analysis of *Helicobacter pylori* in the bile samples. *Dig Dis Sci* 1995; 40: 2214-9.
8. Figura N, Cetta F, Angelico M, et al. Most *Helicobacter pylori*-infected patients have specific antibodies, and some also have *H. pylori* antigens and genomic material in bile. Is it a risk factor for gallstone formation? *Dig Dis Sci* 1998; 43: 854-62.
9. Myung SJ, Kin MH, Shim KN, et al. Detection of *Helicobacter pylori* DNA in human biliary tree and its association with Hepatolithiasis. *Dig Dis Sci* 2000; 45: 1405-12.
10. Monstein HJ, Jonsson Y, Zdolsek J, et al. Identification of *Helicobacter pylori* in human cholesterol gallstones. *Scand J Gastroenterol* 2002; 37: 112-9.
11. Cetta F, Figura N, Montalto G, et al. *Helicobacter pylori* in the bile could play a facilitating role in the pathogenesis of some types of gallstones. *Gastroenterology* 2000; 118: Supple 2:7a
12. Farshad F, Rasouli M, Alborzi A. Simultaneous Detection of *Helicobacter* Genus and *Helicobacter pylori* species using a Multiplex PCR Method. *Iran Biomed J* 2004; 8: 205-9.
13. Choi YK, Han JH, Joo HS. Identification of novel *Helicobacter* species in pig stomachs by PCR and partial sequencing. *J Clin Microbiol* 2001;39:3311-5.
14. Argyros FC, Ghosh M, Huang L, et al. Evaluation of a PCR Primer Based on the isocitrate Dehydrogenase gene for Detection of *Helicobacter pylori* in Feces. *J Clin Microbiol* 2000; 38: 3755-8.
15. Goosen C, Theran J, Ntsala M, et al. Evaluation of a novel heminested PCR assay

based on the phosphoglucosamine mutase gene for detection of *Helicobacter pylori* in saliva and dental plaque. *J Clin Microbiol* 2002; 40: 205-9.

16. Mendez-Sanchez N, Pichardo R, Gonzalez J, et al. Lack of association between *Helicobacter* sp. colonization and gallstone disease. *J Clin Gastroenterol* 2001; 32:138-41.

17. Chen W, Li D, Gannan RJ, Subbs RS. Common presence of *Helicobacter* DNA in the

gallbladder of patients with gallstone diseases and controls. *Dig Liver Dis* 2003; 35: 237-43.

18. Clayton CL, Kleanthous H, Coates PJ, et al. Sensitive detection of *Helicobacter pylori* by using the polymerase chain reaction. *J Clin Microbiol* 1992; 30: 192-200.

19. Fallone CA, Tran S, Semert M, et al. *Helicobacter* DNA in bile: Correlation with hepato-biliary disease. *Aliment Pharmacol Ther* 2003; 17:453-8.