

تأثير البروتين المرتبط بالفايبرونكتين المعزول من بكتريا المكورات  
العنقودية الذهبية على أنزيمات الكبد (GOT , GPT)

*Staphylococcus aureus*

GOT , GPT

(Sonicator)

GOT	(P> 0.05)	
( P> 0.05 )	( 150.782 U/ L )	( 175.286 U/ L )
	( 69.412 U/ L )	GPT
	FnBp	(50.18 U/ L)
	GPT	GOT

### Abstract

Results of injection inside peritoneal cavity are revealed with 0.1 ml of fibronectin binding protein extracted from the cellular wall of *Staphylococcus aureus* for 20 laboratory mice , obvious pathological effects on liver enzymes (GOT , GPT ) .

After diagnostic tests had done , we get 40 strain of *Staphylococcus aureus* , wherease fibronectin binding protein extracted from cellular wall of bacteria via sonicator system . Purification and protein classification by gel filtration and electrophoresis methods had been competed .

Laboratory mice injected with 0.1 ml protein . after 3-4 weeks , blood sample had taken and plasma separated by centrifuge , test done to know effect of protein on above enzyme activity. Results showed that fibronectin binding protein caused meaning increasing, its value was (p> 0.05) in GOT enzyme level reached (175.286 U/L) in compare with control group which was (150.782 U / L) . Also meaning increasing (p> 0.05 ) in GPT enzyme which appeared after treatment with fibronectin binding protein which reached to (69.412 U/L) incompare with control group which was (50.18 U / L) .

In conclusion fibronectin binding protein ( FnBp ) was more effective on liver functions during meaning increasing which was caused by this protein on both enzymes ( GOT , GPT ) .

( Nonmotile )

Humpherys, Kenneth , 2002) (Non capsulated)

( Rich media)

(1997;

( Blood agar)

( Kenneth , 2005)

– (Oxidase) (Catalase )

. Nacl %

(Coagulase )

. ( Kenneth ,2002; Irina *et al.*,2005)

(Fibronectin binding protien ) ( Cell – bound protiens )

( Fibrinogen binding protien)

. ( Glycoprotein )

( Skorstengaard *et al .*, 1986 ; Ana *et al.*,2002) kd

(Integrin) %

. (Heparin) (Fibrin) (Collagen)

NH<sub>2</sub> (Kusela ,1978) *Staph aureus*

( Lysine )

. ( Kusela ,1978 ; Mosher *et al.*,1980 ) (Carbamide )

*Staph aureus*

( Fibronectin)

(Greene *et al .*,1995; Jennifer ,2004 )

)

( ) (A & B)

. ( Proctor *et al .*, 1982 ) (pH , - ) /

( Ozeri *et al.*,1998 ; Van *et al.*,1998 ; Joh *et al.*,1999)

(Osteomyelitis) (Endocarditis)

. (Eric *et al.*,2003 ; Yok *et al.*,2005)

(Fibrinogen)

. ( Matthia *et al.*,2004 )

-

) /

. (

. ( Cruikshank *et al* .,1975 ; Sneath *et al* .,1986 )

-

. ( Sonicator )

S-200

. SDS- PAGE

-

. ( GOT , GPT )

/

**Liver Enzymatic Assay**

-

. ( GPT GOT )

**Glutamic-oxaloacetic-Transaminase GOT**

-

GOT

(Colorimetric kit ) ( FnBp)

Rietman and Frank ., ) (Randox company )

: L- Aspartate Oxaloacetate ( 1957

$\infty$ - oxoglutarate + L- aspartate  $\rightarrow$  L- glutamate + oxaloacetate

:

Kit

: ( R1 ) GOT -

/ -

L- Aspartate / -

oxoglutarate / -

: ( R2 ) GOT -

DNPH / -

HCl / -

( R3 ) -  
 NaoH / -

. ( ) -

. GOT ( )

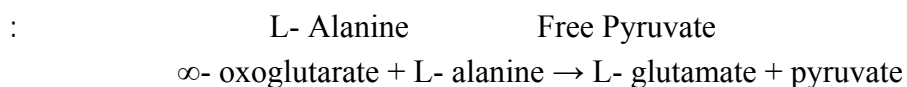
Tubes ( Reagents )	Blank ( Reagent ) ml	(Sample) ml
<b>Blood serum</b>	--	<b>0.1</b>
<b>Reagent 1 ( R1)</b>	<b>0.5</b>	<b>0.5</b>
<b>D. W</b>	<b>0.1</b>	-
		-
<b>Reagent 2 ( R2)</b>	<b>0.5</b>	<b>0.5</b>
		-
<b>Reagent 3 ( R3)</b>	<b>5</b>	<b>5</b>
		-

**Glutamic-Pyruvic-Transaminase GPT -**

colorimetric

( Reitman and Frank ., 1957 )

( Randox company )



: ( R1 ) GPT -  
 / -  
 L- alanine / -  
 $\infty$ - oxoglutarate / -  
 : ( R2 ) GPT -  
 DNPH / -  
 HCL / -  
 -  
 NaoH /

( )

GOT

GPT

.( Unite/ L)

-

( ) *Staph aureus* %

. ( Sood , 1989 )

. ( Macfadin , 1985 ) *Staph aureus*

(Coagulase )

. ( Dickson and Marples , 1986)

-

Sonicator

*S.aureus*

.(Cooling centrifuge )

. ( Halby , 1975 )

S-200

(Stellwagen , 1990 )

)

SDS

(Relative mobility) ( Rm)

.( SDS-PAGE ) SDS

%

( - ) SDS

(GOT,GPT )

GPT GOT

( )

( 175.286 U/L ) GOT (P> 0.05)

( 150.782 U/ L )

GPT (P> 0.05)

( 50.18 U/ L ) (69.412 U/ L )

( GOT, GPT ) ( )

Groups	GOT	GPT
Negative control	150.782 +	50.18 +
Positive control	175.286 +	69.412 +

FnBp

GPT GOT

*Staph aureus*

**Conclusions**

( GOT

GPT

FnBp

GPT GOT

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