

***Bioengineered Ag/AgCl Nanoparticles from Kocuria kristinae: Sustainable Synthesis with Potent Antibacterial, Hepatotoxic, and Enzyme-Modulating Activities***

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Patient Name:		Patient ID:															
Location:		Physician:															
Lab ID: S07/B6		Isolate Number: 1															
Organism Quantity:		Collected:															
Selected Organism: <b>Kocuria kristinae</b>																	
Source:																	
Comments:																	
<b>Identification Information</b>		<b>Analysis Time:</b> 4.80 hours	<b>Status:</b> Final														
<b>Selected Organism</b>		99% Probability	<b>Kocuria kristinae</b>														
<b>ID Analysis Messages</b>		<b>Bionumber:</b>	010030300000030														
<b>Biochemical Details</b>																	
2	AMY	-	4	PIPLC	-	5	dXYL	-	8	ADH1	+	9	BGAL	-	11	AGLU	(-)
13	APPA	-	14	CDEX	-	15	AspA	-	16	BGAR	-	17	AMAN	-	19	PHOS	-
20	LeuA	+	23	ProA	+	24	BGURr	-	25	AGAL	-	26	PyrA	-	27	BGUR	-
28	AlaA	+	29	TyrA	+	30	dSOR	-	31	URE	-	32	POLYB	-	37	dGAL	-
38	dRIB	-	39	ILATk	-	42	LAC	-	44	NAG	-	45	dMAL	-	46	BACI	-
47	NOVO	-	50	NC6.5	-	52	dMAN	-	53	dMNE	-	54	MBdG	-	56	PUL	-
57	dRAF	-	58	O129R	-	59	SAL	-	60	SAC	+	62	dTRE	+	63	ADH2s	-
64	OPTO	-															

**Figure S1.** Identification of *Kocuria kristinae* using Vitek 2 automated system

<b>Patient Name</b>	<b>Referred By:</b> OP	 SML1056137					
<b>Age:</b>	<b>Sample Code:</b> 796299						
<b>Data Record:</b> 10/12/2023 10:08 AM	<b>Printout:</b> 13/12/2023 03:03 PM						
<b>Microbiology</b>							
<b>Culture &amp; Sensitivity</b>							
<b>Test Name</b>	<b>Result</b>						
Sample type							
Result (Isolated microorganism)	Staphylococcus aureus						
<b>Antibiotic</b>	<b>Result</b>	<b>MIC</b>	<b>Inhibition Zone</b>	<b>Antibiotic</b>	<b>Result</b>	<b>MIC</b>	<b>Inhibition Zone</b>
Gentamicin	Sensitive		18	Fusidic acid	Sensitive		26
Ceftriaxone	Sensitive		24	Clindamycin	Resistance		0
Minocycline	Sensitive		21	Oxacillin	Sensitive		18
Trimethoprim-Sulfamethoxazole	Resistance		0	Rifampin	Sensitive		26
Ciprofloxacin	Resistance		13	Doxycycline	Resistance		10
Cefoxitin	Sensitive		28	chloramphenicol	Resistance		12
Levofloxacin	Resistance		14	Vancomycin	Resistance		14
Tigecycline	Sensitive		18	Azithromycin	Resistance		12
Linezolid	Sensitive		24	Ofloxacin	Resistance		8
Clarithromycin	Resistance		0	Erythromycin	Resistance		0
Tetracycline	Resistance		0	Moxifloxacin	Resistance		14
<b>Comment (Culture):</b>	Sensitive antibiotics : Gentamicin, Ceftriaxone, Minocycline, Cefoxitin , Tigecycline, Linezolid, Fusidic acid , Oxacillin , Rifampin .						

**Figure S2.** Identification and antibiotic sensitivity pattern of *Staphylococcus aureus* using Vitek 2 automated system.

<b>Identification Information</b>	Card: GN		Status: Final		
<b>Selected Organism</b>	99% Probability <i>Pseudomonas aeruginosa</i> Bionumber: 0003453103500252				
<b>Susceptibility Information</b>	Card: AST-N326		Status: Final		Analysis Time: 10.39 hours
<b>Antimicrobial</b>	<b>MIC</b>	<b>Interpretation</b>	<b>Antimicrobial</b>	<b>MIC</b>	<b>Interpretation</b>
Piperacillin	≥ 128	R	Netilmicin	≥ 32	R
Piperacillin/Tazobactam	≥ 128	R	Tobramycin	≥ 16	R
Ceftazidime	≥ 64	R	Ciprofloxacin	≥ 4	R
Cefepime	≥ 32	R	Levofloxacin	≥ 8	R
Aztreonam			Tetracycline		
Imipenem	≥ 16	R	Tigecycline	≥ 8	R
Meropenem	≥ 16	R	Colistin		
Amikacin	≥ 64	R	Trimethoprim/Sulfamethoxazole		
Gentamicin	≥ 16	R			
+= Deduced drug *= AES modified **= User modified					

**Figure S3.** Identification and antibiotic sensitivity pattern of *Pseudomonas aeruginosa* using Vitek 2 automated system.

<b>Identification Information</b>	Card: GN		Status: Final		
<b>Selected Organism</b>	99% Probability <i>Acinetobacter baumannii</i> Bionumber: 0201010303500210				
<b>Susceptibility Information</b>	Card: AST-N326		Status: Final		Analysis Time: 8.45 hours
<b>Antimicrobial</b>	<b>MIC</b>	<b>Interpretation</b>	<b>Antimicrobial</b>	<b>MIC</b>	<b>Interpretation</b>
Piperacillin	≥ 128	R	Netilmicin	2	S
Piperacillin/Tazobactam	≥ 128	R	Tobramycin	8	I
Ceftazidime	≥ 64	R	Ciprofloxacin	≥ 4	R
Cefepime			Levofloxacin	≥ 8	R
Aztreonam			Tetracycline	≤ 1	S
Imipenem	≥ 16	R	Tigecycline	≤ 0.5	S
Meropenem	≥ 16	R	Colistin		
Amikacin			Trimethoprim/Sulfamethoxazole	160	R
Gentamicin	≥ 16	R			
+ = Deduced drug * = AES modified ** = User modified					

**Figure S4.** Identification and antibiotic sensitivity pattern of *Acinetobacter baumannii* using Vitek 2 automated system.