CHEMISTRY JOURNAL OF MOLDOVA. General, Industrial and Ecological Chemistry
ISSN 1857-1727 E-ISSN 2345-1688
http://cjm.asm.md
http://dx.doi.org/10.19261/cjm.2022.957

SYNTHESIS, CHARACTERIZATION AND ANTIBACTERIAL ACTIVITIES OF FERROCENE LIGANDS AND THEIR BINUCLEAR COMPLEXES

Ozan Süleyman Ürgüt [a*], Aydin Tavman [b], Muazzez Gürgan Eser [c]

[a]*Department of Chemistry, Faculty of Arts and Sciences, Tekirdag Namik Kemal University, Namik Kemal District, Degirmenalti Campus, 1, Campus str., Suleymanpasa-Tekirdag 59030, Turkey*
[b] *Department of Chemistry, Engineering Faculty, Istanbul University-Cerrahpasa, University District, 7, Baglarici str., Avcilar-Istanbul 34320, Turkey*
[c]*Department of Biology, Faculty of Arts and Sciences, Tekirdag Namik Kemal University, Namik Kemal District, Degirmenalti Campus, 1, Campus str., Suleymanpasa-Tekirdag 59030, Turkey*
[*]*e-mail: ourgut@nku.edu.tr, phone: (+90 282) 25 026 52*

Received: 26 July 2021/ Revised final: 26 November 2021/ Accepted: 19 November 27 2021

Table S1

The analytical data and physical properties of the ligands and the complexes.

Compound	*Elemental analysis %*						*Yield*	*m.p.*	μ_{eff}	Λ_M	*Color*
	calc.	*found*	*calc.*	*found*	*calc.*	*found*					
	N		C		H		%	°C	BM		
L1	8.32	8.11	60.66	59.87	3.89	4.12	71	267-269		4.80	Yellow
1a	5.42	6.55	39.51	40.39	2.93	2.78	78	280-282	6.20	30.6	Dark green
1b	5.71	5.18	41.59	40.82	3.08	3.64	81	170-172	1.10	20.7	Brown
1c	5.73	5.09	41.75	40.98	3.09	3.45	85	>300	1.80	31.0	Brown
1d	5.38	4.74	39.23	39.47	3.68	3.73	88	>300	5.11	31.8	Dark green
1e	5.27	5.55	38.38	38.97	2.84	2.66	71	>300	2.20	104.1	Brown
HL2	4.12	4.98	60.12	60.01	4.16	4.76	72	114-116		22.9	Claret red
2a	2.60	2.54	37.96	37.23	3.37	3.98	75	>300	5.70	37.9	Brown
2b	2.84	2.76	41.34	41.78	3.27	3.07	90	120-122	1.90	14.1	Claret red
2c	2.85	2.14	41.49	40.93	3.28	3.78	69	240-242	1.72	26.3	Brown
2d	2.68	1.98	39.00	38.42	3.85	4.03	84	148-150	4.41	44.6	Brown
2e	2.62	2.32	38.17	38.87	3.01	3.57	70	>300	0.00	73.1	Brown

μ_{eff}, effective magnetic moment (room temperature); Λ_M, Molar conductivity, $\Omega^{-1}\,cm^2\,mol^{-1}$ (25±1°C).

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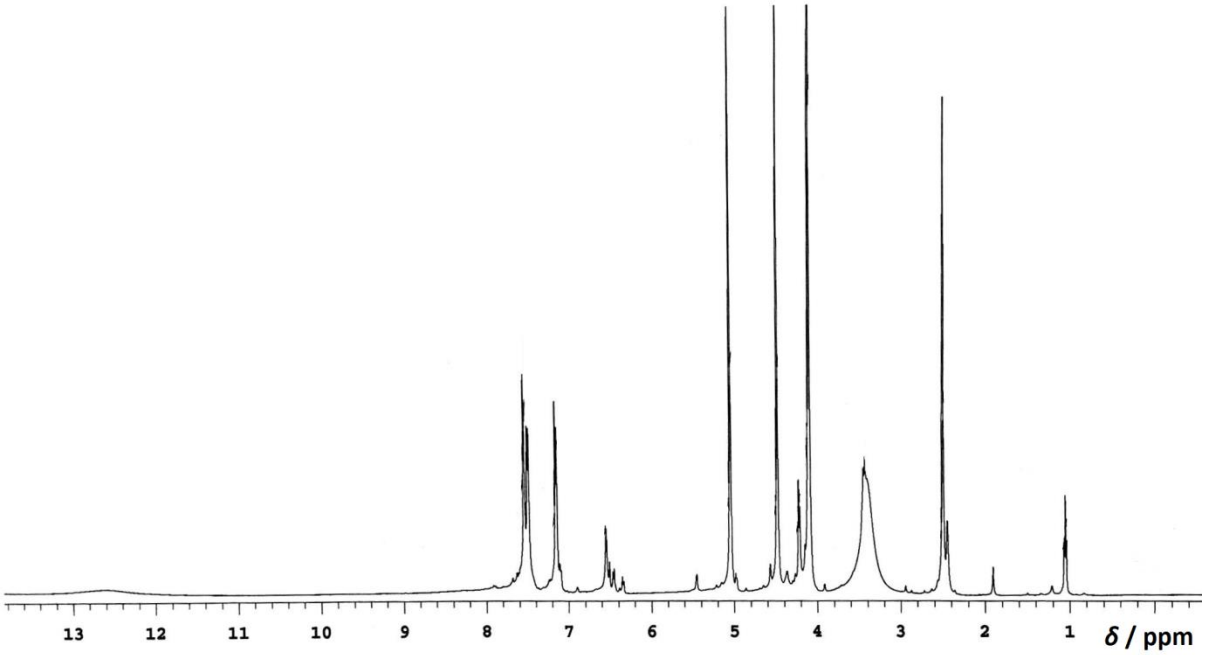

Figure S1. ^{1}H-NMR spectra of L1.

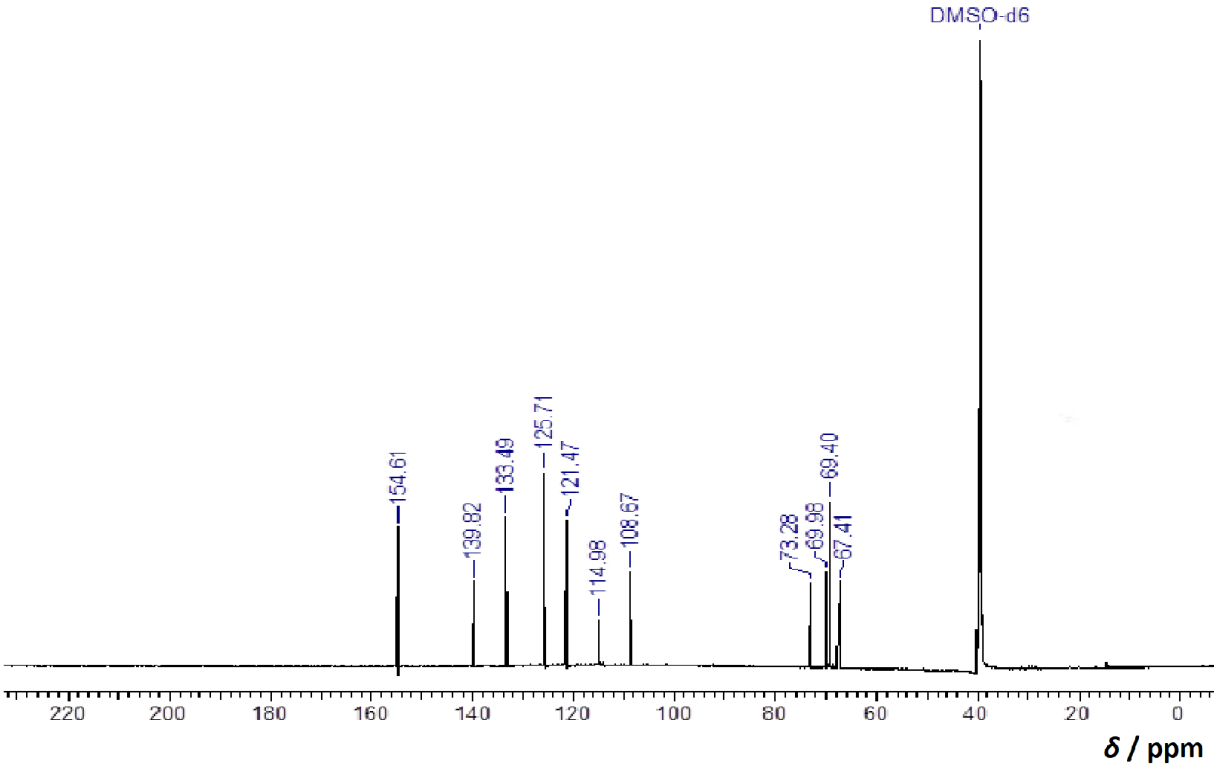

Figure S2. ^{13}C NMR spectra of L1.

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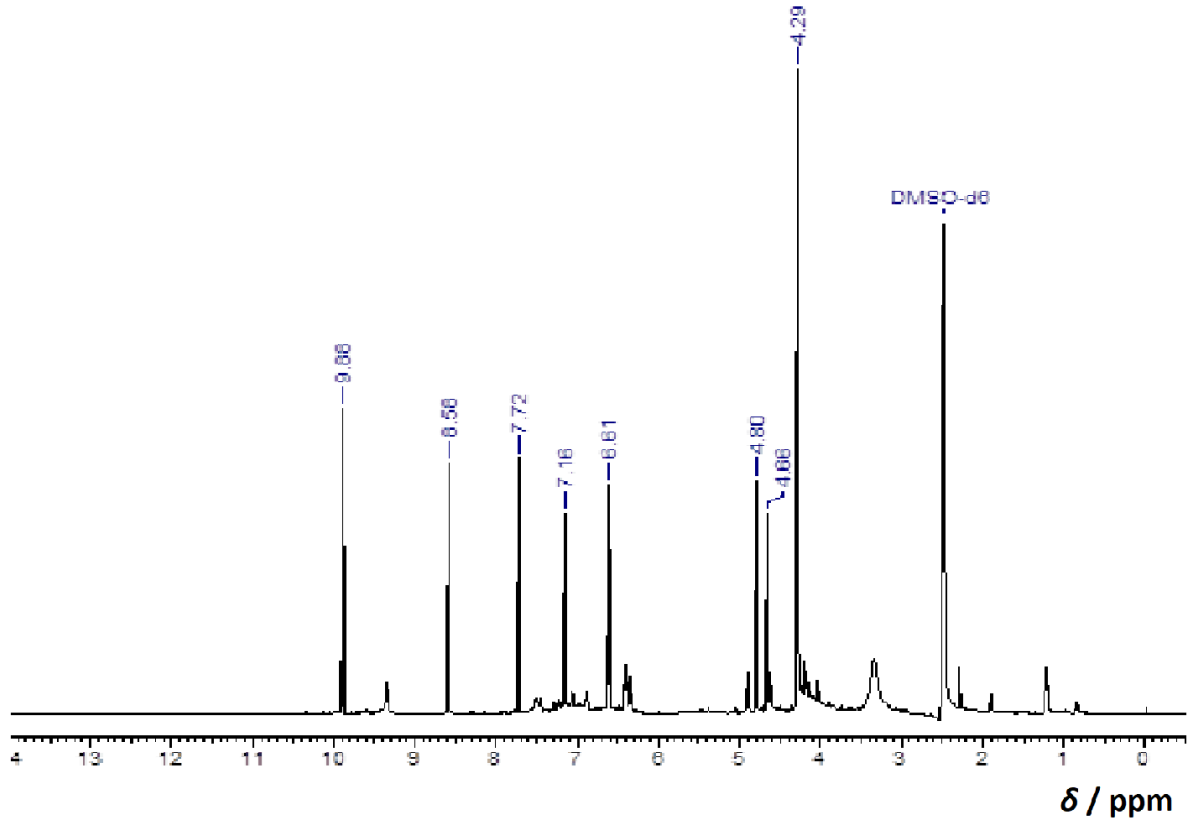

Figure S3. ^{1}H NMR spectra of HL2.

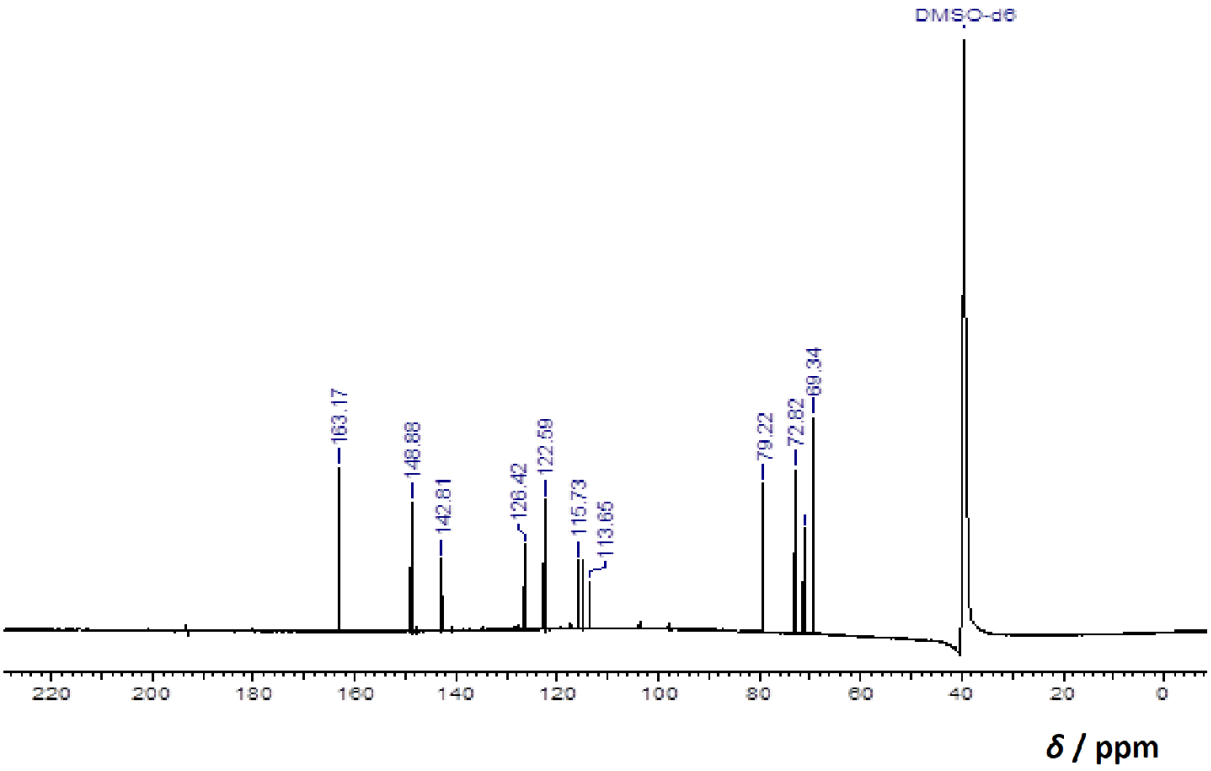

Figure S4. ^{13}C NMR spectra of HL2.

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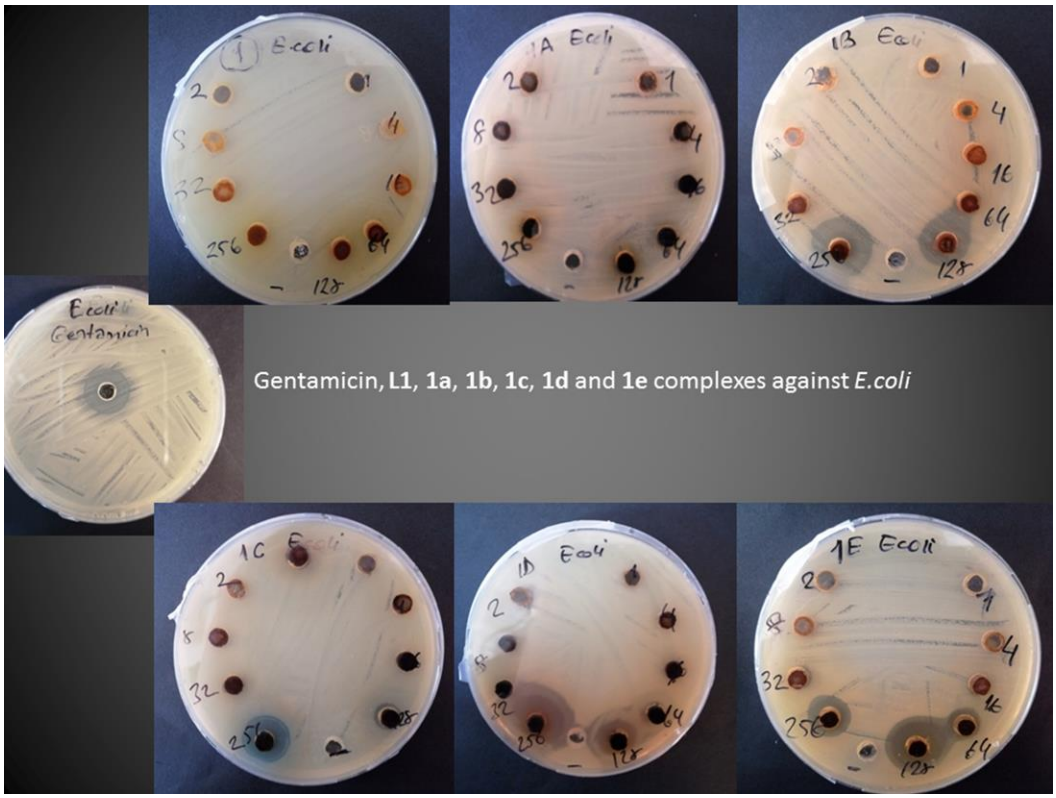

Figure S5. Gentamicin, L1, 1a, 1b, 1c, 1d and 1e complexes against *E. coli.*

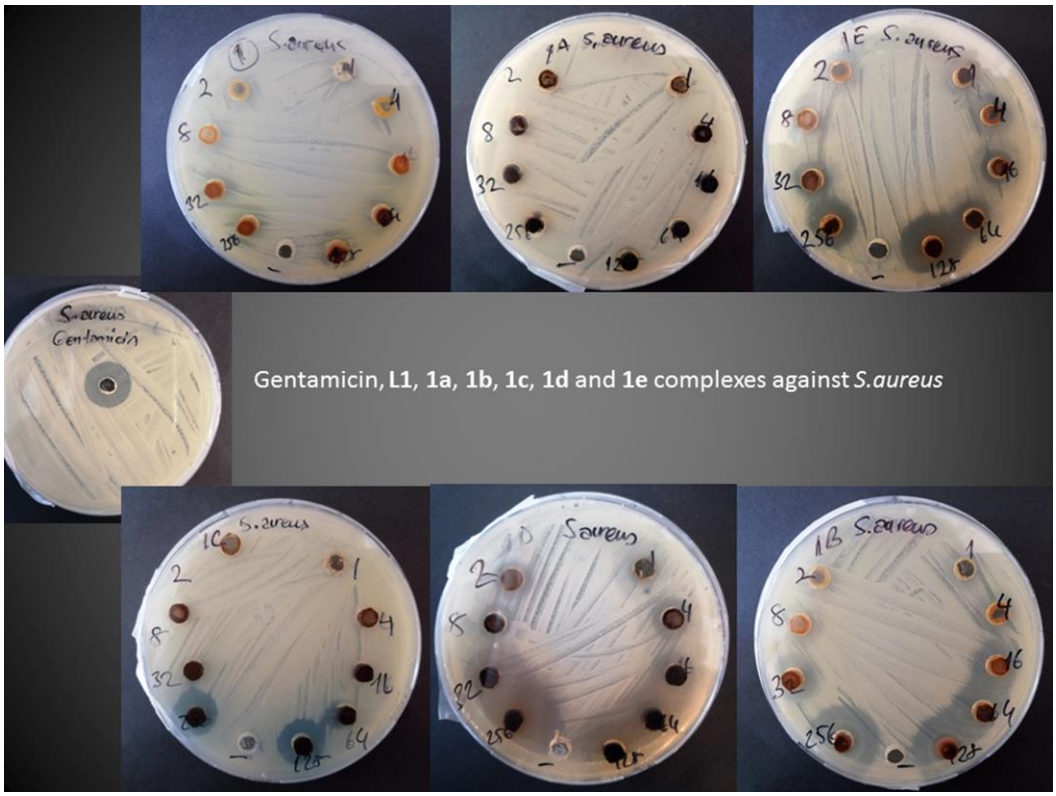

Figure S6. Gentamicin, L1, 1a, 1b, 1c, 1d and 1e complexes against *S. aureus.*

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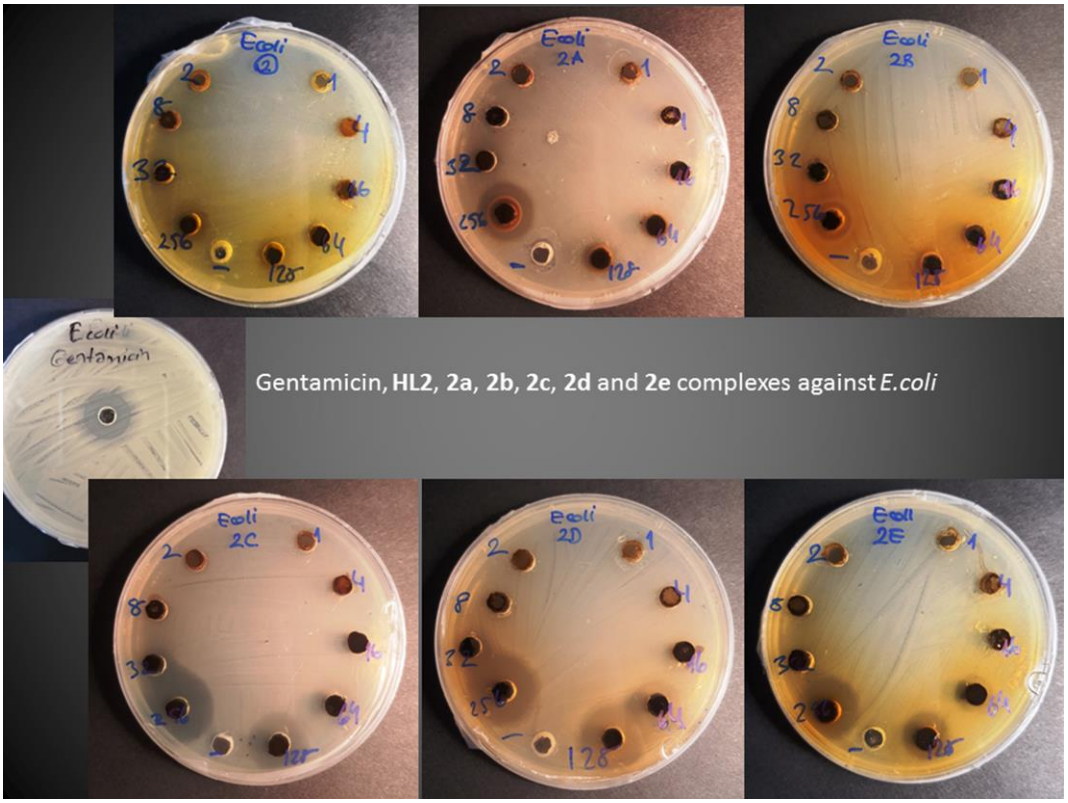

Figure S7. Gentamicin, HL2, 2a, 2b, 2c, 2d and 2e complexes against *E. coli.*

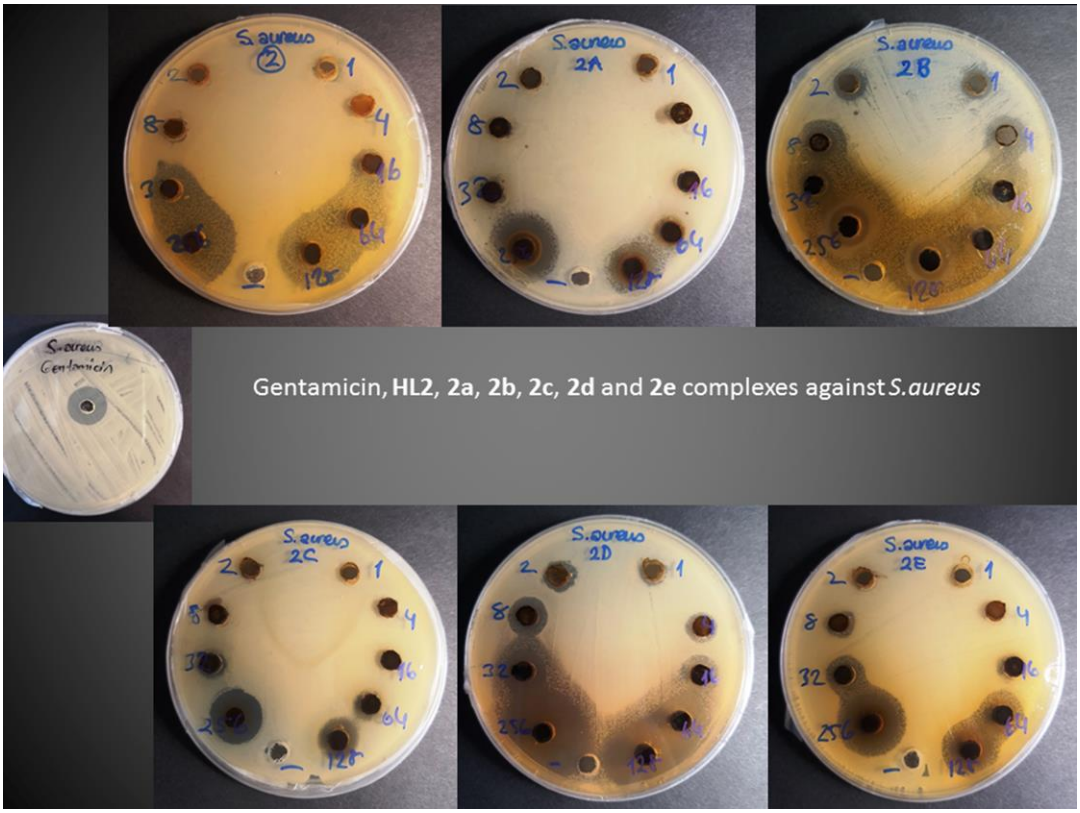

Figure S8. Gentamicin, HL2, 2a, 2b, 2c, 2d and 2e complexes against *S .aureus.*