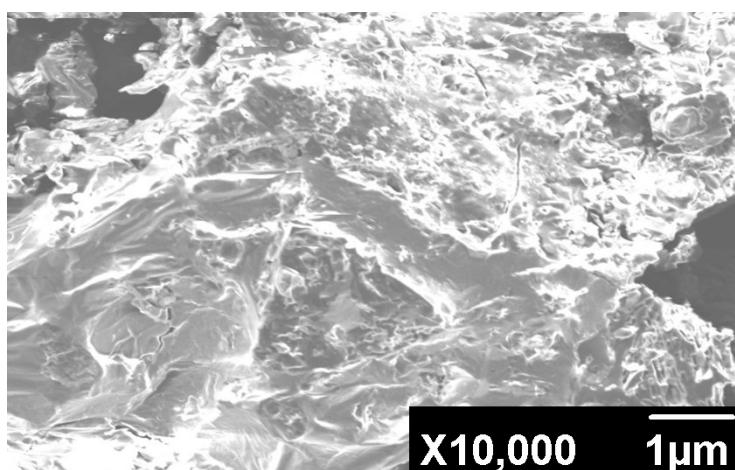
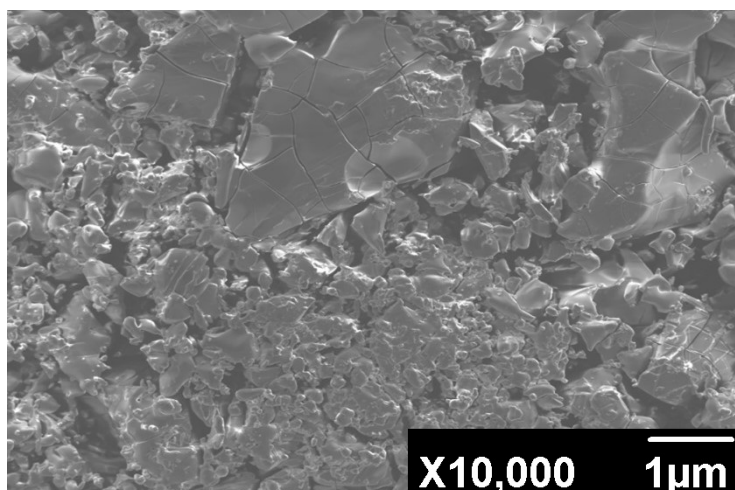


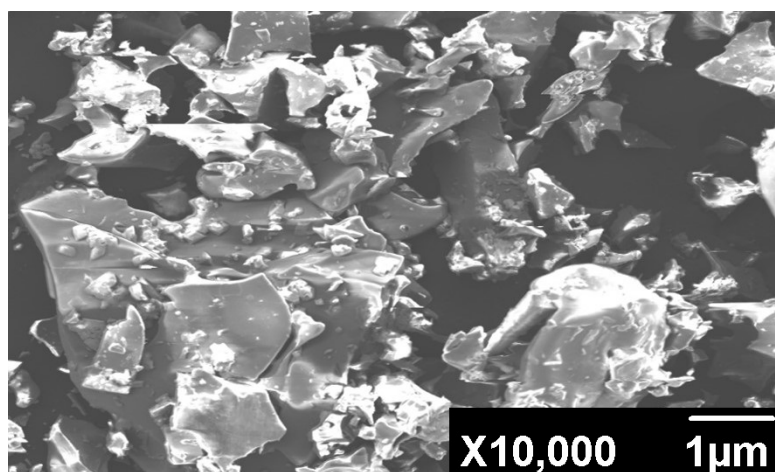
**Figure S1A.** SEM photo of adrenaline free binding moiety.



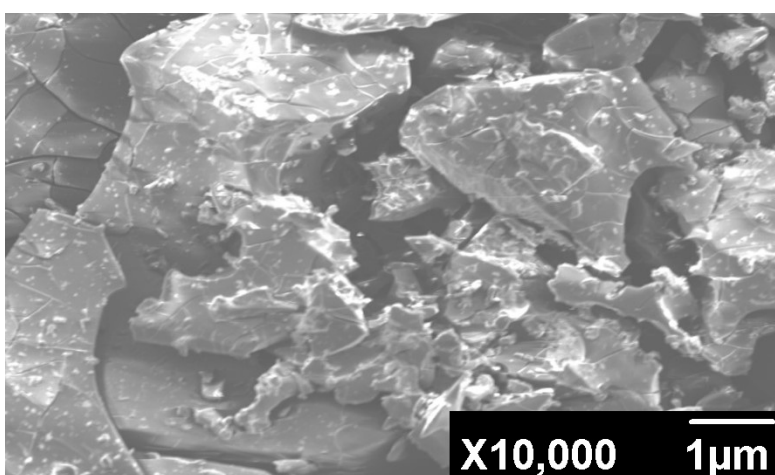
**Figure S1B.** SEM photo of  $[Y_2(Adr)_2(H_2O)_8]Cl_{3.8}H_2O$  adduct.



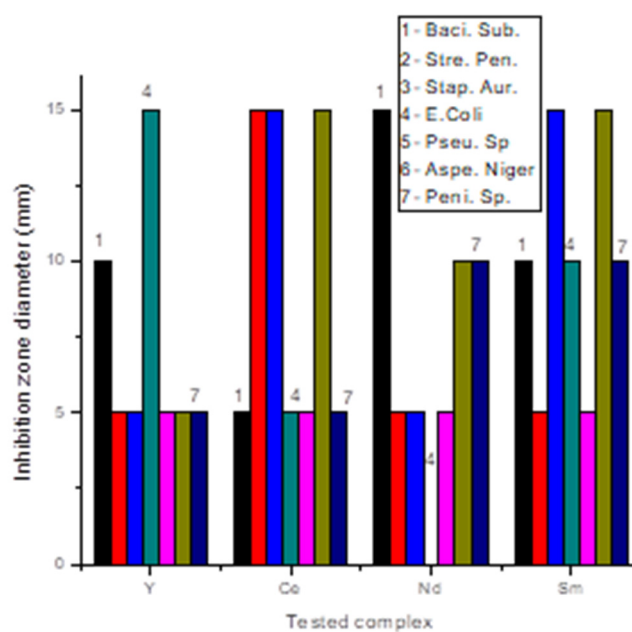
**Figure S1C.** SEM photo of  $[Nd(Adr)_2(H_2O)_2]Cl_{3.6}H_2O$  adduct.



**Figure S1D.** SEM photo of  $[\text{Ce}(\text{Adr})_2(\text{H}_2\text{O})_2]\text{Cl}_3 \cdot 10\text{H}_2\text{O}$  adduct.



**Figure S1E.** SEM photo of  $[\text{Sm}(\text{Adr})_2(\text{H}_2\text{O})_2]\text{Cl}_3 \cdot 12\text{H}_2\text{O}$  adduct.



**Figure S2.** The width of the inhibition zone of adrenaline and its adducts against bacteria and fungus.

**Table S1a:** Infrared frequency categorization (cm<sup>-1</sup>) and preliminary designations of adrenaline and its adducts.

Assignments	Compounds				
	Adr	Y(III)	Ce(III)	Nd(III)	Sm(III)
$\nu(\text{O-H})$	3368 3368 3351	3383 3118	3391 3135	3398 3166	3327
$\nu(\text{C-H})$ ; Ar $\nu(\text{N-H})$	3035 3023	3045	3030	3038	3030
$\nu(\text{C-H})$ ; Alip	3000	2830	2966 2822	2966 2806	2869
$\nu(\text{C-C})$ ; Ar $\delta(\text{N-H})$	1525 1496	1605 1493 1453	1605 1517 1461	1605 1485 1429	1589 1485 1421
$\delta(\text{C-OH})$	1350 1256	1365 1244	1269	1253	1380 1253
$\nu(\text{C-O})$	1278 1157 1175	--	--	--	--
$\nu(\text{C-C})$ ; CH <sub>2</sub> NHCH <sub>3</sub> $\nu(\text{C-O})$	1205 1141	1205 1165	1165 1117	1165 1117	1165
$\delta(\text{C-C-H})$	1105 1082 1061 1029	1100 1060 973 941 868 812	1060 1020 932 868 812	1068 1020 924 860 804	1060 1029 941 868 812 780
$\delta(\text{C-C-C})$	689 649 633 612	644	636 604	644	636
$\delta(\text{C-C-O})$	598 583 535 512 504 483	508 476	508	548	596

**Table S1b:** Categorization Raman frequencies (cm<sup>-1</sup>) and tentative adrenaline.

Frequencies (cm <sup>-1</sup> )	Tentative assignments
--	$\nu(\text{O-H})$
3047 3024	$\nu(\text{C-H})$ ; Ar $\nu(\text{N-H})$
2995	$\nu(\text{C-H})$ ; Alip
1504	$\nu(\text{C-C})$ ; Ar $\delta(\text{N-H})$
1346	$\delta(\text{C-OH})$
1288 1177	$\nu(\text{C-O})$
--	$\nu(\text{C-C})$ ; CH <sub>2</sub> NHCH <sub>3</sub> $\nu(\text{C-O})$
1109 1087 1035	$\delta(\text{C-C-H})$
655	$\delta(\text{C-C-C})$
605 537 491	$\delta(\text{C-C-O})$