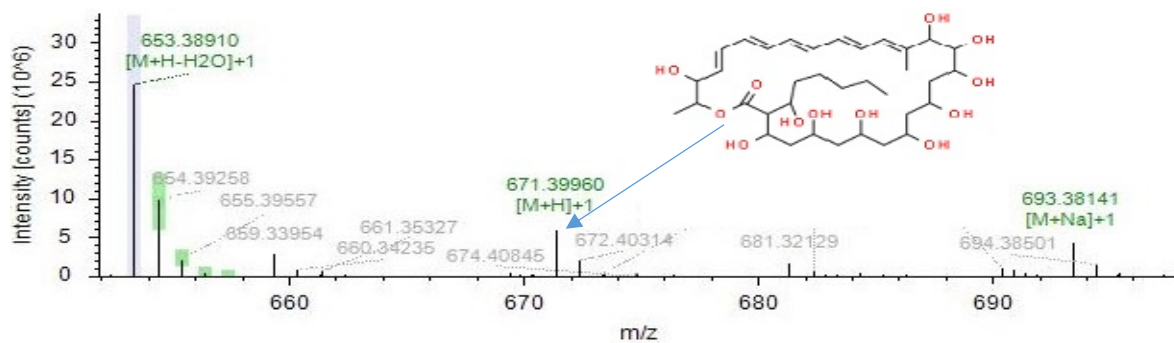
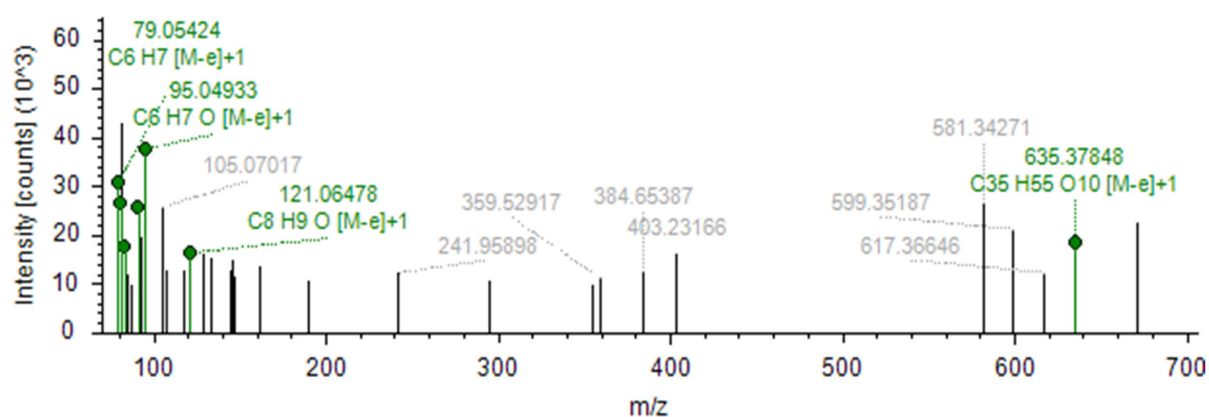


Supplementary Materials

List of Supplementary figures

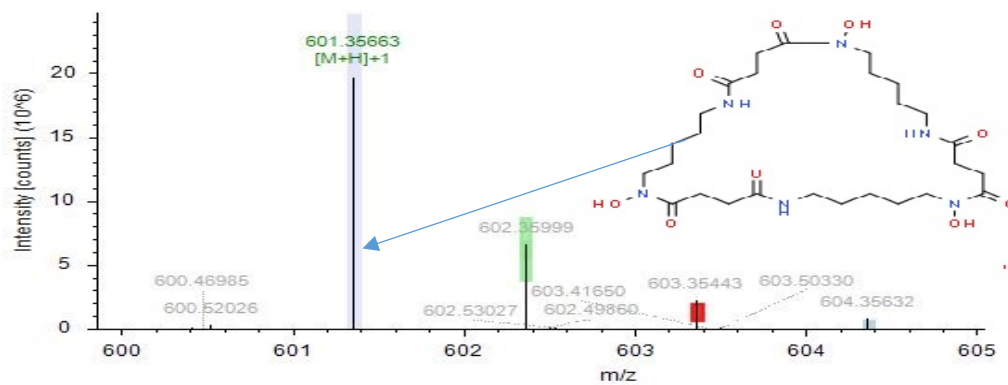


(A)

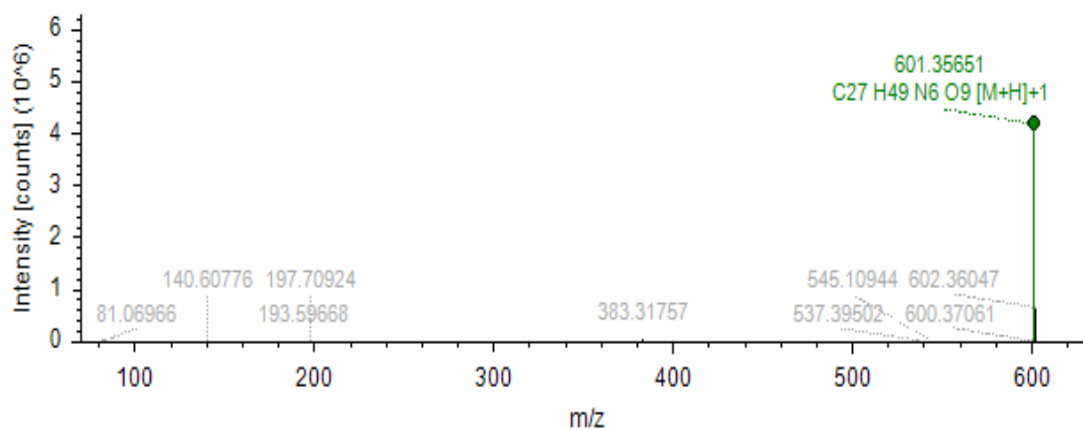


(B)

Figure S1: High resolution LC-MS/MS spectrum of fermentation broth extracts of *S. murinus* THV12 corresponding to pentamycin (A) shows MS1 spectrum of pentamycin $[M+H]^+1$ at m/z 671.39 with RT= 12.33 min (B) shows MS2 spectrum of pentamycin with in-source fragments at m/z 79.05, 95.04, 121.06, 635.37



(A)



(B)

Figure S2: High resolution LC-MS/MS spectrum of fermentation broth extracts of *S. murinus* THV12 corresponding to desferrioxamine E (A) shows MS1 spectrum of desferrioxamine E $[M+H]^+$ at m/z 601.35 with RT= 20.79 min (B) shows MS2 spectrum of desferrioxamine E with in-source fragments at m/z 601.35

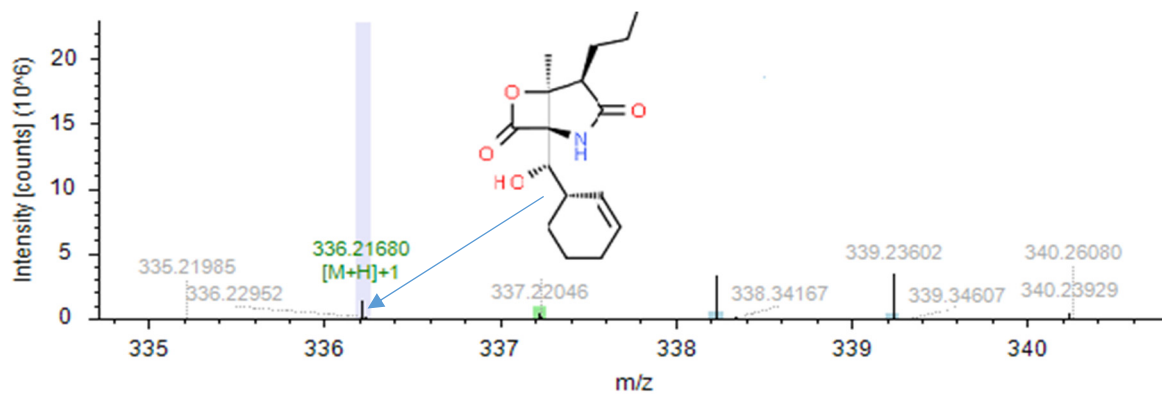


Figure S3: High resolution LC-MS/MS spectrum of fermentation broth extracts of *S. murinus* THV12 corresponding to cinnabaramide A, depicts MS1 spectrum of cinnabaramide A $[M+H]^+$ at m/z 336.21 with RT= 15.52 min

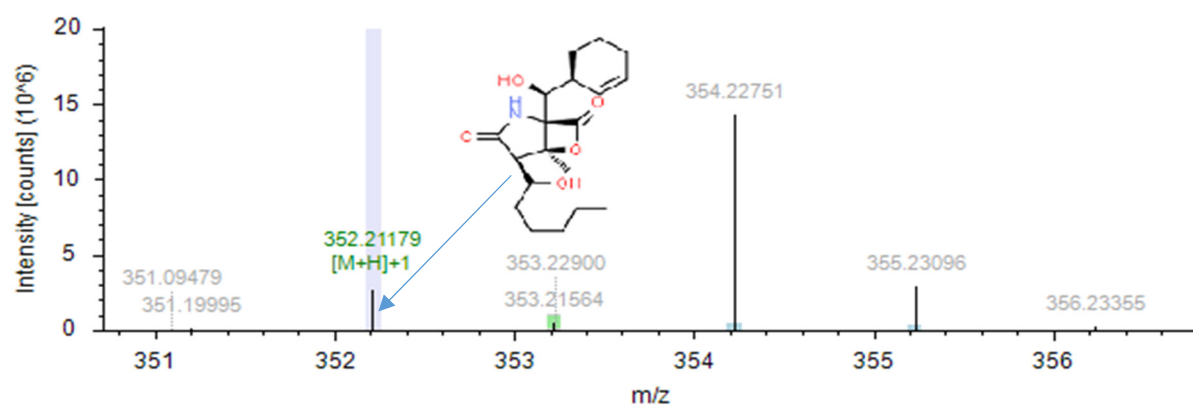
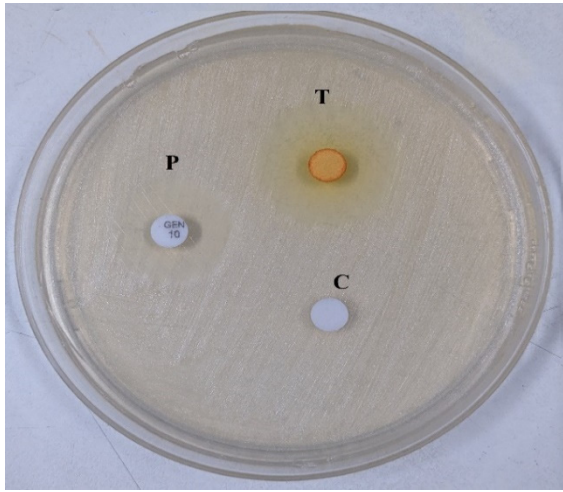
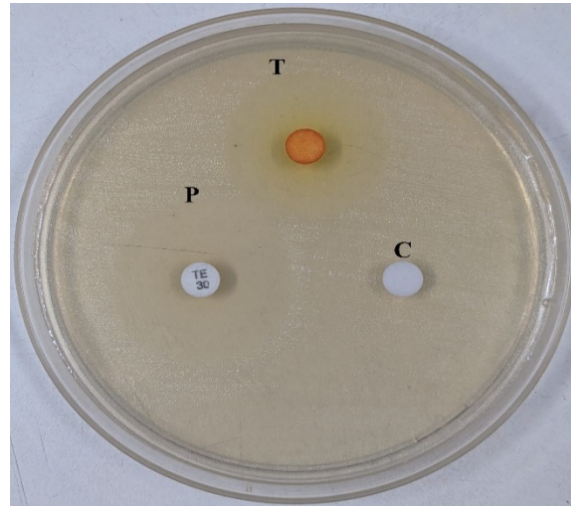


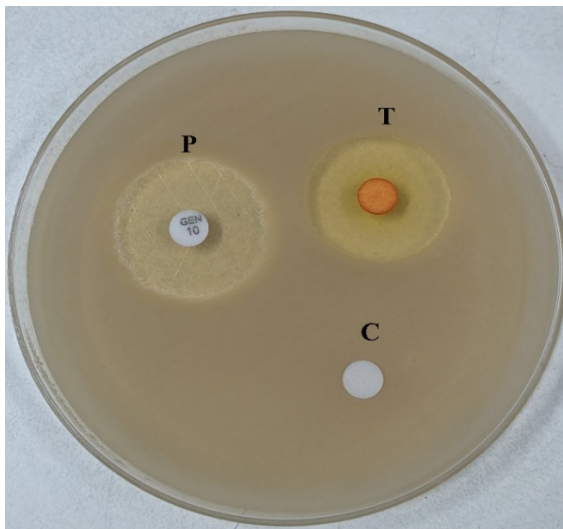
Figure S4: High resolution LC-MS/MS spectrum of fermentation broth extracts of *S. murinus* THV12 corresponding to cinnabaramide B, depicts MS1 spectrum of cinnabaramide B $[M+H]^+$ at m/z 352.21 with RT= 13.70 min



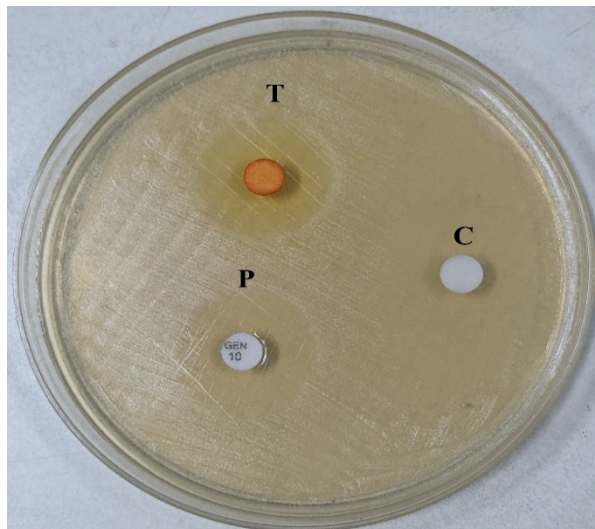
Methicillin-resistant Staphylococcus aureus



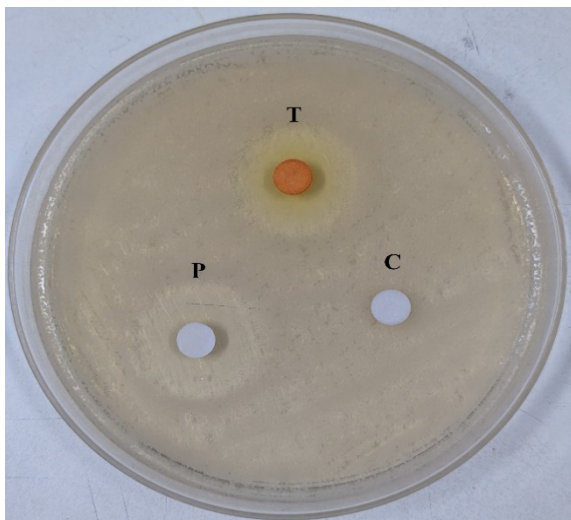
Enterococcus faecalis



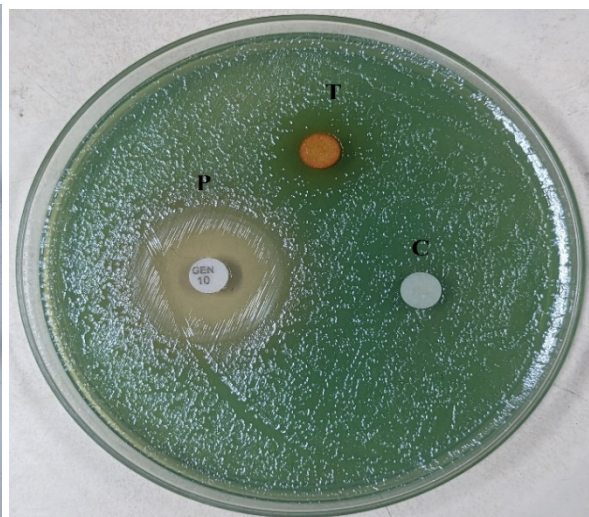
Bacillus cereus



Listeria monocytogenes



Candida albicans



Pseudomonas aeruginosa

Figure S5: Antagonistic activity exhibited by *S. murinus* THV12 strain (P denotes positive control which are standard antibiotics, T denotes *S. murinus* culture extract and C denotes the control solvent DMSO)

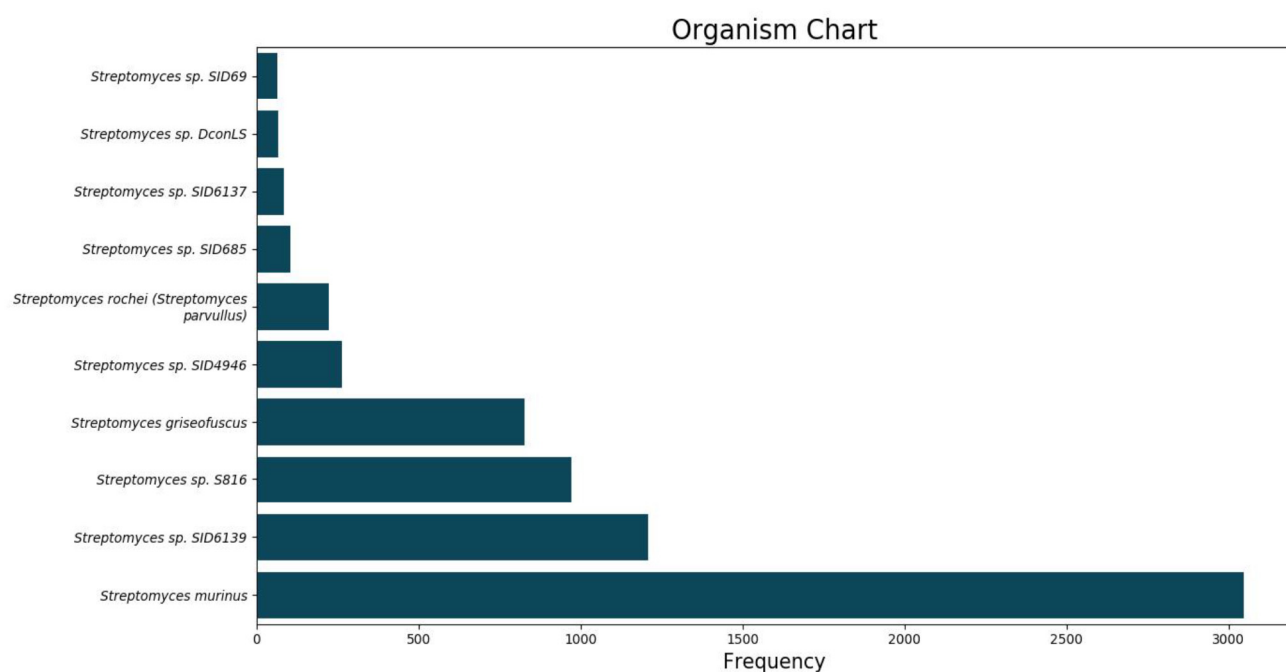


Figure S6: BLASTX top 10 hits generated for the functional annotation of the genes from *S. murinus* THV12

Putative Identity	Molecular Formula	Adduct type	RT [min]	ss error (ppm)	Calc. MW	m/z	FISh Coverage	Matched Fragment ions	Highest expression in
Cyclo(L-Pro-L-Val)	C10 H16 N2 O2	[M+H] ⁺ 1	6.405	-0.73	196.12103	197.1283	67.24	70.06506,98.05983,169.13341,197.12830	PDB
Albuquinone A	C11 H10 N2 O3	[M+H] ⁺ 1	7.354	-0.17	218.0691	219.0764	32.14	159.09183,173.07088,220.07993	PDB
Spoxazomicin D	C10 H10 N2 O3	[M+H] ⁺ 1	9.02	-0.21	206.0691	207.0764	40.79	88.03902,120.04400,179.08092,207.07599	CcBs
Actinomycin D4	C60 H84 N12 O16	[M+2H] ⁺ 2	16.978	0.68	1228.6137	615.3141	21.35	86.09645,197.12935,300.19183,628.32050,957.4374 4,1297.09998	SCB
Actinomycin X08	C62 H86 N12 O17	[M+2H] ⁺ 2	14.952	0.49	1270.624	636.3193	18.75	72.04465,86.09645,300.19183,628.32050,956.45129	SCB, PDB
Alkyldihydropyrone B	C11 H18 O3	[M+H-H ₂ O] ⁺ 1	8.91	0.07	198.12561	181.1223	45.1	121.10099,123.08031,139.11147,163.11174, 181.12215	All
Anthramycin	C16 H17 N3 O4	[M+H] ⁺ 1	8.085	-0.43	315.12177	316.1291	28.57	282.12433 ,316.12912	ISP2, GSB
Cyclo-(Leu-Ile)	C12 H22 N2 O2	[M+H] ⁺ 1	9.882	-0.56	226.168	227.1753	45.35	86.09638, 199.18066, 227.17557	PDB,R5M
Daryamide E	C17 H24 N2 O5	[M+2H] ⁺ 2	7.995	-0.11	336.16849	169.0915	18.42	98.05998, 169.09157	CcBs
Deacetyldemethylanisomycin	C11 H15 N O3	[M+H] ⁺ 1	6.949	-0.32	209.10513	210.1124	67.16	91.05405, 119.04897, 151.07521, 210.11232	PDB
Delaminomycin A	C29 H43 N O6	[M+H] ⁺ 1	17.517	0.09	501.30908	502.3164	54.12	133.10107, 149.09607, 485.28891	OMB
Amorphane sesquiterpenes	C15 H26 O4	[M+H] ⁺ 1	10.139	0.24	270.18317	271.1905	64.71	81.06989, 235.17006, 253.17921	R5M
Enduspeptide A	C47 H74 N10 O13	[M+2H] ⁺ 2	19.044	0.13	986.54381	494.2792		Nil	PDB,OMB
Mullinamide A	C23 H37 N5 O7	[M+H] ⁺ 1	8.438	-0.23	495.26918	496.2765	56.68	100.03918, 296.16061, 478.2657, 496.27655	All
N-(4-hydroxyphenethyl)-2-(1H-indol-3-yl)acetamide	C18 H18 N2 O2	[M+H] ⁺ 1	10.627	-0.22	294.13676	295.144	47.37	120.08061, 295.14410	All
Nalidixic acid	C12 H12 N2 O3	[M+H] ⁺ 1	7.603	-0.1	232.08477	233.0921	45.45	187.08656, 215.08174, 233.09219	PDB
Trichostatin	C16 H20 N2 O3	[M+H] ⁺ 1	8.519	0.09	288.14742	289.1547	45.95	146.09663, 164.10690, 174.09151, 271.14417,289.15491	PDB
Oxopropaline G	C15 H14 N2 O2	[M+H] ⁺ 1	8.978	0.12	254.10556	255.1128	44	237.10242, 255.11276	CcBs
2,5-diisopropyl -3-methoxy pyrazine	C11 H18 N2 O	[M+H] ⁺ 1	10.697	-0.03	194.14191	195.1492	45.83	111.05515, 195.14919	CzD, R5M
Pyrrolam B	C8 H13 N O2	[M+H+MeOH] ⁺ 1	8.847	-0.22	155.09459	188.1281	18.64	128.10686, 156.10199, 188.12888	ISP2, PDB

Salinosporamide K	C13 H17 N O4	[M+H] ⁺ 1	10.266	-0.13	251.11572	252.123	65.52	193.08601, 208.13356, 210.11386, 252.12227	PDB
Streptcytosine A	C30 H42 N6 O9	[M+H] ⁺ 1	12.303	-0.01	630.30132	631.3088	20.26	70.06512, 126.09090, 233.09225	All

Table S1: Putative compounds identified by LC-HR-MS/MS