



Unlocking Nature’s Treasure Trove: Exploring Microorganisms for Novel Bioactives

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Supplementary info

SL	Bioactive Name	Species	Bioactive Properties								References
			Antibacterial	Antifungal	Cytotoxic	Immunosuppressive	Antitumor/Anticancer	Anti- Inflammatory	Anti- Oxidant	Immune Modulation	
1	Bagremycin A and B	<i>Streptomyces sp. Tii 4128</i>	√	√	-	-	-	-	-	-	(BERTASSO et al., 2001)
2	Bagremycins F and G	<i>Streptomyces sp. ZZ745</i>	√	-	-	-	-	-	-	-	(Zhang et al., 2018)
3	Aranciamycin K (1) and Isotirandamycin B	<i>Streptomyces sp. SCSIO 41399</i>	√	√	√	-	-	-	-	-	(Cong et al., 2018)
4	Blanchaquinone	<i>Australian Streptomyces sp. (Streptomyces strain (MST-77755))</i>	√	-	√	-	-	-	-	-	(Clark et al., 2004)
5	Penicacids E–G	<i>Penicillium parvum HDN17-478</i>	√	√	-	√	√	-	-	-	(CHEN et al., 2020)
6	Tauramamide	<i>Brevibacillus laterosporus</i>	√	-	-	-	-	-	-	-	(Komal, 2021)
7	Bacillistatins 1 & 2	<i>Bacillus silvestris</i>	√	-	-	-	√	-	-	-	(Komal, 2021)

8	TP-1161	<i>Nocardopsis sp.</i>	√	-	-	-	-	-	-	-	(Komal, 2021)
9	Unnarmicins	<i>Phaeobacter sp.</i>	√	-	-	-	-	-	-	-	(Komal, 2021)
10	Holomycin	<i>Photobacterium halotolerans</i>	√	-	-	-	-	-	-	-	(Komal, 2021)
11	Althiomycin	<i>Myxococcus fulvus</i>	√	-	-	-	-	-	-	-	(Komal, 2021)
12	Ayamycin	<i>Nocardia sp.</i>	√	-	-	-	-	-	-	-	(El-Gendy et al., 2008)
13	Ascochyatin	<i>Ascochyta sp.</i>	√	-	√	-	√	-	-	-	(Kanoh et al., 2008)
14	Ferrirubin	<i>Talaromyces pinophilus</i>	√	-	-	-	-	-	-	-	(Singh et al., 2017)
15	Misamycin	<i>Streptomyces</i>	√	-	√	-	√	-	-	-	(Li et al., 2014)
16	Spirodioxynaphthalenes	<i>Decaisnella thyridioides</i>	√	√	-	-	√	-	-	-	(Jiao et al., 2006)
17	Spirobisnaphthalenes	<i>Berkleasium sp.</i>	√	√	√	-	-	-	-	-	(Shan et al., 2014)
18	Sesquiterpenoids and Isocoumarins	<i>Penicillium minioluteum</i> ZZ1657	√	-	-	-	-	-	-	-	(Ma et al., 2020)
19	Lipopeptidolactone	<i>Paenibacillus sp.</i>	-	√	-	-	-	-	-	-	(Kai et al., 2013)
20	FR220897, FR220899	<i>Coleophoma empetri</i>	-	√	-	-	-	-	-	-	(Kanasaki et al., 2006)
21	Amphidinol 22	<i>Amphidinium carterae</i>	-	√	√	-	-	-	-	-	Ameen et al., 2021
22	Dibenzo- α -pyrone	<i>Rhizopycnis vagum</i> Nitaf22	-	-	√	-	-	-	√	-	(Lai et al., 2016)
23	Asparaginase	<i>Eurotium sp.</i>	-	-	-	-	√	-	-	-	(Singh et al., 2017)

24	L-asparaginase	<i>Aspergillus niger</i>	-	-	-	-	√	-	-	-	(Ameen et al., 2021)
25	Mithramycin SK, Mithramycin SA, Demycarosyl- mithramycin SK	<i>Streptomyces argillaceus</i>	-	-	-	-	√	-	-	-	(Núñez et al., 2012)
26	Chandrananimycin A-C	<i>Actinomadura sp.</i>	-	-	-	-	√	-	-	-	(Ashu et al., 2019)
27	Iso-C16 fengycin B, and anteiso-C17 fengycin B	<i>Bacillus mojavensis</i>	-	-	-	-	√	-	-	-	(Ashu et al., 2019)
28	Mixirin A-C, Halobacillin	<i>Bacillus sp.</i>	-	-	-	-	√	-	-	-	(Ashu et al., 2019)
29	Dermacozine F and G	<i>Dermacoccus abyssi</i>	-	-	-	-	√	-	-	-	(Ashu et al., 2019)
30	Ankaraholide A	<i>Geitlerinema sp.</i>	-	-	-	-	√	-	-	-	(Ashu et al., 2019)
31	Nisin A	<i>Lactococcus lactis</i>	-	-	-	-	√	-	-	-	(Ashu et al., 2019)
32	3-methylcarbazoles	<i>Streptomyces</i>	-	-	-	-	-	√	-	-	(Singh et al., 2017)
33	Penisclerotiorin A (1), Diaporthein C (8), Penidepsidone A (4)	<i>Penicillium sclerotiorum</i> GZU-XW03-2	-	-	-	-	-	√	-	-	(Zhao et al., 2020)
34	Aerococcus uriaequi	<i>Exopolysaccharide</i>	-	-	-	-	-	-	√	-	(Ameen et al., 2021)
35	Methanolic extract	<i>Novosphingobium sp. PP1Y</i>	-	-	-	-	-	-	√	-	(Petruk et al., 2018)
36	Bioactive Peptides	<i>Lactic Acid Bacteria (LAB)</i>	-	-	-	-	-	-	√	√	(Venegas-Ortega et al., 2019)