

Supporting Information II

Capsimycin Derivatives from *Streptomyces* sp. PH9007 as α -Glucosidase Inhibitors and Insights into Their Biosynthetic Gene Cluster

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Identity (%)		100	PH9007_orf10	PH9007_orf9	PH9007_orf8	
			1	1	1	<i>Kitasatospora</i> sp. NPDC005751 (Cluster 127, score: 5.545) NZ_JBEXYC010000006.1:231770-245662
			1	1	1	<i>Kitasatospora</i> sp. NBC_01246 (Cluster 135, score: 5.543) NZ_CP108484.1:4052484-4066319
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			1	1	1	<i>Kitasatospora</i> sp. NPDC058263 (Cluster 112, score: 5.547) JBHVXO010000003.1:62-13882
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			1	1	1	<i>Kitasatospora</i> sp. NPDC050467 (Cluster 113, score: 5.546) NZ_JBITHX010000008.1:224621-238452
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			1	1	1	<i>Streptomyces</i> sp. MS19 (Cluster 32, score: 5.549) NZ_JBIZOH010000021.1:89271-101433
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			1	1	1	<i>Streptomyces</i> sp. NPDC049881 (Cluster 30, score: 5.552) NZ_JBFAMN010000004.1:240288-252450
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			1	1	1	<i>Streptomyces</i> sp. CB01881 (Cluster 34, score: 5.539) NZ_CP026498.1:7158197-7171834
			1	1	1	<i>Kitasatospora</i> sp. RG8 (Cluster 133, score: 5.543) NZ_JAGIYX010000014.1:182228-195838
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			1	1	1	<i>Kitasatospora</i> sp. NPDC058406 (Cluster 155, score: 5.539) NZ_JBHXKE010000042.1:15238-29224
			1	1	1	<i>Streptomyces daliensis</i> DSM 42095 (Cluster 222, score: 5.534) JAGSMN010000697.1:289-12690
			1	1	1	<i>Kitasatospora</i> sp. NPDC056327 (Cluster 173, score: 5.536) NZ_JBHJRC010000012.1:5789-19513
			1	1	1	<i>Kitasatospora purpeofusca</i> NRRL B-1817 (Cluster 218, score: 5.534) NZ_JODS01000007.1:193447-207222
			1	1	1	<i>Kitasatospora purpeofusca</i> NPDC088790 (Cluster 219, score: 5.533) NZ_JBIVKE010000001.1:587152-600889
			1	1	1	<i>Streptomyces</i> sp. NPDC098077 (Cluster 45, score: 5.528) NZ_JBIWAX010000009.1:247243-261141
			1	1	1	<i>Lysobacter capsici</i> VKM B-2533 (Cluster 195, score: 5.539) NZ_CP094357.1:2159666-2175541
			1	1	1	<i>Lysobacter capsici</i> AZ78 (Cluster 197, score: 5.539) NZ_JAJA020000001.1:1367923-1383798
			1	1	1	<i>Lysobacter capsici</i> X2-3 (Cluster 199, score: 5.539) NZ_KQ061217.1:1075167-1091042
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			1	1	1	<i>Lysobacter capsici</i> 55 (Cluster 193, score: 5.54) NZ_CP011130.1:2205581-2221456
			1	1	1	<i>Lysobacter capsici</i> 55 (Cluster 194, score: 5.539) CP011130.1:2205581-2221456
			1	1	1	<i>Lysobacter</i> sp. yr284 YR284 (Cluster 212, score: 5.535) NZ_FNPT010000001.1:697659-713493
			1	1	1	<i>Lysobacter enzymogenes</i> Lj46 (Cluster 214, score: 5.533) NZ_CP117873.1:2480658-2496532
			1	1	1	<i>Streptomyces</i> sp. BpilaLS-43 (Cluster 47, score: 5.529) NZ_FMCB010000031.1:15343-29295
			1	1	1	<i>Streptomyces</i> sp. SID8358 (Cluster 49, score: 5.529) NZ_WWGT010000016.1:300736-314688
			1	1	1	<i>Streptomyces</i> sp. NPDC058330 (Cluster 38, score: 5.533) NZ_JBHVZS010000026.1:58229-72181
			1	1	1	<i>Streptomyces</i> sp. (Cluster 40, score: 5.532) DNQU010000210.1:1711-15663
			1	1	1	<i>Actinoalloteichus</i> sp. AHMU CJ021 (Cluster 187, score: 5.536) NZ_CP025990.1:5353022-5366863
			1	1	1	<i>Actinoalloteichus caeruleus</i> NRRL B-2194 (Cluster 209, score: 5.536) NZ_JODV010000008.1:4950-18791
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			1	1	1	<i>Actinoalloteichus caeruleus</i> DSM 43889 (Cluster 210, score: 5.536) NZ_AUBJ020000001.1:423855-437696
			1	1	1	<i>Actinoalloteichus hymeniacidonis</i> HPA177 (Cluster 190, score: 5.546) CP014859.1:2949554-2963557
			1	1	1	<i>Actinoalloteichus hymeniacidonis</i> HPA177 (Cluster 189, score: 5.546) NZ_CP014859.1:2949554-2963557
			1	1	1	<i>Actinoalloteichus hymeniacidonis</i> DSM 45092 (Cluster 191, score: 5.546) NZ_JACHIS010000001.1:3359241-3373244
			1	1	1	<i>Amycolatopsis panacis</i> YIM PH21725 (Cluster 207, score: 5.537) NZ_QZFO01000108.1:3454-18550
			1	1	1	<i>Amycolatopsis sulphurea</i> NPDC005183 (Cluster 203, score: 5.537) NZ_JIAKZ010000015.1:107772-122874
			1	1	1	<i>Amycolatopsis sulphurea</i> DSM 46092 (Cluster 205, score: 5.537) NZ_PDJK01000002.1:891952-907054
			1	1	1	<i>Streptomyces</i> sp. NPDC006197 (Cluster 14, score: 5.552) NZ_JBEXSZ010000027.1:35915-51141
			1	1	1	<i>Streptomyces</i> sp. NPDC015346 (Cluster 22, score: 5.549) NZ_JBIBTW010000009.1:273246-288542
			1	1	1	<i>Streptomyces</i> sp. NPDC126499 (Cluster 16, score: 5.551) NZ_JBEQUO010000005.1:351878-367128
			1	1	1	<i>Kitasatospora</i> sp. NPDC056184 (Cluster 177, score: 5.535) NZ_JBHJUI010000025.1:64613-78328
			1	1	1	<i>Kitasatospora</i> sp. NPDC015120 (Cluster 179, score: 5.536) NZ_JBIBVJ010000002.1:245108-258728
			1	1	1	<i>Kitasatospora</i> sp. NPDC057965 (Cluster 157, score: 5.538) NZ_JBHVVP010000010.1:231285-244950
			1	1	1	<i>Kitasatospora</i> sp. NPDC057541 (Cluster 145, score: 5.539) NZ_JBHVFD010000017.1:9303-22968
			1	1	1	<i>Kitasatospora</i> sp. NPDC057595 (Cluster 147, score: 5.539) NZ_JBHVGL010000001.1:228157-241822
			1	1	1	<i>Kitasatospora</i> sp. NPDC047058 (Cluster 171, score: 5.537) NZ_JBEYVJ010000009.1:35256-49059
			1	1	1	<i>Kitasatospora</i> sp. NPDC127111 (Cluster 175, score: 5.537) NZ_JBHXTG010000002.1:65409-79256
			1	1	1	<i>Kitasatospora purpeofusca</i> ZZ-48 (Cluster 216, score: 5.535) NZ_CP170483.1:4167641-4181279
			1	1	1	<i>Actinoalloteichus fjordicus</i> ADI127-7 (Cluster 183, score: 5.549) NZ_CP016076.1:4219111-4233110
			1	1	1	<i>Actinoalloteichus</i> sp. GBA129-24 (Cluster 185, score: 5.549) NZ_CP016077.1:4279768-4293767
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			1	1	1	<i>Kitasatospora</i> sp. NPDC057692 (Cluster 143, score: 5.538) NZ_JBHVIV010000012.1:8995-22679
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			1	1	1	<i>Kitasatospora</i> sp. NPDC001527 (Cluster 153, score: 5.538) NZ_JBEPAM010000001.1:218290-231961
			1	1	1	<i>Streptomyces</i> sp. B1866 (Cluster 12, score: 5.552) NZ_JAVSCF010000023.1:3237-17188
			1	1	1	<i>Actinomycetes bacterium</i> (Cluster 89, score: 5.571) JAOPYO010000185.1:13901-27799
			1	1	1	<i>Streptomyces</i> sp. NPDC002055 (Cluster 20, score: 5.547) NZ_JBEOXS010000005.1:186575-200541
			1	1	1	<i>Streptomyces</i> sp. NPDC001922 (Cluster 24, score: 5.544) NZ_JBIASV010000015.1:225295-239270
			1	1	1	<i>Streptomyces</i> sp. NPDC046727 (Cluster 26, score: 5.545) NZ_JBEYR010000022.1:103344-115593
			1	1	1	<i>Streptomyces</i> sp. CA-210063 (Cluster 43, score: 5.534) NZ_CP102512.1:10469115-10481355
			1	1	1	<i>Streptomyces carpaticus</i> FH1 (Cluster 86, score: 5.7) NZ_J