

TABLE S1. Phenotypic and chemotaxonomic characterization of actinobacterial strains recovered from diorite rocks.

Character	Streptomyces	Nocardioides	Kitasatospora	Nocardopsis	Micromonospora	Actinomadura	Unknown
No. of strains (Total 34)	8	8	4	4	2	2	6
Macromorphology							
<i>Substrate mycelium color</i>							
White	1	1	3	1	0	1	1
Cream	2	2	1	3	0	1	0
Yellow	1	3	0	0	0	0	0
Violet	1	0	0	0	0	0	0
Olive	1	2	0	0	0	0	1
Brown	1	0	0	0	0	0	1
Orange	0	0	0	0	2	0	1
Red	1	0	0	0	0	0	2
<i>Aerial mycelium color</i>							
White	1	0	0	1	0	1	0
White-gray	1	0	1	1	0	0	1
Cream	0	0	1	0	0	0	0
Yellow	0	1	0	0	0	0	1
Olive	2	3	0	0	0	0	0
Pink	1	0	0	0	0	0	1
Gray	2	3	2	2	0	1	0
Green	0	1	0	0	0	0	1
Brown	1	0	0	0	0	0	1
<i>Substrate mycelium pigments on ISP4</i>							
Green	1	0	1	0	0	0	0
Reddish brown	0	0	2	0	0	0	0
Brown	1	0	7	0	0	0	0
Yellow	0	0	0	0	0	0	1
Micromorphology							
<i>Substrate mycelium sporulation</i>							
Fragmentation	2	8	2	5	2	0	2
Single spore	0	0	0	0	6	0	1
Flexibiles spore chain	2	0	0	0	0	0	0
Sporangia formation	1	0	0	0	0	0	3
Vesicles	1	0	0	0	0	0	0
<i>Aerial mycelium sporulation</i>							
Fragmentation	1	8	0	4	0	0	1
Flexibiles spore chain	2	0	7	0	0	1	0
Rectiflexibies spore chain	1	0	1	0	0	0	1
Open spirals	3	0	0	0	0	1	2
Compact spirals	1	0	0	0	0	0	0
Sporangia formation	0	0	0	0	0	0	1
Chemotaxonomy							
<i>Diaminopimelic acid (DAP) isomer in whole cell hydrolysate</i>							
L-DAP	8	8	4	0	0	0	2
m-DAP	0	0	4	4	2	2	4
<i>Whole cell diagnostic Sugar pattern</i>							
Xylose	0	0	0	0	2	0	1
Arabinose	0	0	0	0	2	0	2
Galactose	0	0	4	0	0	0	2
Madurose	0	0	0	0	0	2	1
Rhamnose	0	0	0	0	0	0	1
Mannose	0	0	0	0	0	0	0
<i>Mycolic acid(MA)</i>							
MA presence	0	0	0	0	0	0	0

TABLE S2. Mass fingerprint data of *Micromonospora citrea* EMCC 1923 metabolic extract.

Mass (Da)	Intensity (%)	Mass (Da)	Intensity (%)	Mass (Da)	Intensity (%)	Mass (Da)	Intensity (%)	Mass (Da)	Intensity (%)	Mass (Da)	Intensity (%)	Mass (Da)	Intensity (%)
106.3	<10	156.1	<10	203.1	<10	256.2	<10	377.9	30	448.5	32	693.6	<10
112.4	<10	157.2	<10	204.2	<10	258.4	23	379.1	90	449.5	<10	694.7	14
113.4	<10	158.3	<10	205.2	<10	260.8	<10	380.1	50	450.8	25	708.7	<10
115.5	<10	159.4	<10	206.2	<10	265.1	21	381.3	<10	453.1	22	712.0	<10
116.5	<10	162.4	<10	208.4	<10	266.1	<10	382.4	<10	454.1	<10	724.9	40
118.5	<10	169.9	<10	212.7	<10	268.3	55	383.4	<10	471.1	13	726.0	22
122.6	<10	170.9	<10	213.7	<10	269.4	<10	384.5	<10	473.5	<10	743.3	18
125.8	52	172.1	86	215.0	<10	270.4	<10	385.6	<10	489.3	11	745.5	<10
126.9	<10	173.1	<10	216.1	<10	278.4	<10	386.7	38	491.5	<10	749.1	<10
127.9	<10	174.1	<10	219.2	92	279.4	23	402.5	<10	517.7	<10	752.4	<10
130.0	<10	178.4	<10	220.2	<10	285.9	<10	403.6	40	523.5	22	759.5	<10
131.0	<10	180.6	<10	221.4	<10	286.9	<10	404.6	15	524.5	<10	775.7	35
132.1	78	182.8	<10	223.5	<10	295.9	28	405.8	<10	541.6	<10	776.7	33
133.1	<10	188.1	<10	225.8	<10	309.2	15	416.1	<10	573.6	36	794.1	12
139.3	<10	189.1	<10	229.1	<10	310.2	<10	417.2	26	574.6	<10	795.2	10
141.5	<10	190.2	<10	230.2	<10	313.4	<10	418.4	<10	591.8	11	810.8	15
144.7	93	191.2	<10	231.2	<10	322.3	23	419.4	<10	592.8	<10	826.5	28
145.7	<10	194.5	<10	232.3	<10	326.8	<10	420.5	<10	623.8	38	827.6	22
146.7	55	195.7	100	236.5	75	330.1	33	421.6	14	626.1	<10	845.1	10
149.8	27	196.6	<10	237.6	<10	331.1	<10	428.3	<10	642.1	11	877.5	16
150.9	<10	197.6	20	238.7	<10	339.1	<10	429.4	<10	658.2	<10	878.6	14
153.0	88	198.7	<10	243.3	<10	340.1	<10	434.1	<10	674.3	44	896.1	<10
154.0	<10	199.8	<10	245.5	<10	354.4	12	435.2	<10	675.4	<10	928.6	13
155.1	35	201.0	<10	254.0	<10	360.1	<10	436.4	<10	676.5	<10	1031.4	<10
156.0	<10	202.0	<10	255.1	<10	366.7	<10	446.3	<10	692.6	18	1134.1	<10