

## Characterization and partial purification of an antibacterial agent from halophilic actinomycetes *Kocuria* sp. strain rsk4

Ravi Ranjan Kumar<sup>1\*</sup>, Vasantba J Jadeja<sup>2</sup>

<sup>1</sup>Department of Biotechnology, Shree M. & N. Virani Science College, Kalawad Road, Rajkot 360005, Gujarat, India

<sup>2</sup>Department of Microbiology, Shree M. & N. Virani Science College, Kalawad Road, Rajkot 360005, Gujarat, India

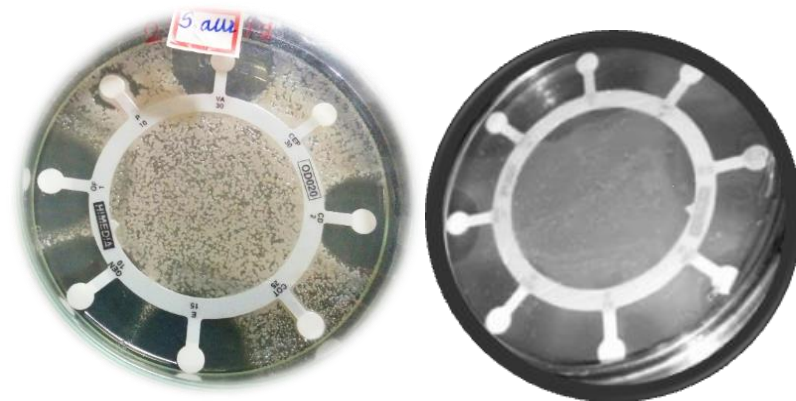
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### *Isolation of halophilic actinomycetes*



**Figure S1:** Isolate rsk4

### *Antibacterial potential of strain rsk4*



**Figure S2:** Antibiotic susceptibility test of *Staphylococcus aureus*



**Figure S3:** Antibacterial assay of rsk by agar well diffusion method

***Taxonomic characterization of the organism***

**Table S1:** Antibiotic resistance tests of strain rsk4

Characteristic	Strain rsk4
<i>Growth in the presence of antibiotics</i>	
Ampicillin	+
Ciprofloxacin	-
Colistin	-
Co-timoxazole	-
Gentamicin	+
Nitrofurantoin	-
Streptomycin	-
Tetracycline	-
Cephalothin	-
Clindamycin	-
Erythromycin	-
Ofloxacin	+
Penicillin-G	+
Vancomycin	+

“+” growth, “-” no growth

**Table S2:** Colony characteristic of actinomycetes isolates

Medium	Size	Shape	Elevation	Opacity	Texture	Margin	Colour
ISP2	Small	Circular	Raised	Opaque	Moist	Smooth	Orange
ISP4	Small	Circular	Raised	Opaque	Moist	Smooth	Orange
ISP5	Small	Circular	Raised	Opaque	Moist	Smooth	Orange
ISP7	Small	Circular	Raised	Opaque	Moist	Smooth	Orange
Nutrient agar	Small	Circular	Raised	Opaque	Moist	Smooth	Reddish orange
tryptone soya agar	Small	Circular	Raised	Opaque	Moist	Smooth	Reddish orange
starch casein	Small	Circular	Raised	Opaque	Moist	Smooth	Reddish orange

**Table S3:** Sequence alignment of strain rsk4

Select: [All](#) [None](#) Selected:0

Alignments [Download](#) [GenBank](#) [Graphics](#) [Distance tree of results](#)

Description	Max score	Total score	Query cover	E value	Ident	Accession
<input type="checkbox"/> <a href="#">Kocuria palustris strain TAGA27 16S ribosomal RNA gene, partial sequence</a>	2078	2078	99%	0.0	94%	<a href="#">NR_026451.1</a>
<input type="checkbox"/> <a href="#">Kocuria assamensis strain S9-65 16S ribosomal RNA, partial sequence</a>	2061	2061	99%	0.0	94%	<a href="#">NR_132604.1</a>
<input type="checkbox"/> <a href="#">Kocuria atrinae strain P30 16S ribosomal RNA gene, partial sequence</a>	1897	1897	99%	0.0	92%	<a href="#">NR_116744.1</a>
<input type="checkbox"/> <a href="#">Kocuria rosea strain DSM 20447 16S ribosomal RNA gene, partial sequence</a>	1890	1890	99%	0.0	92%	<a href="#">NR_044871.1</a>
<input type="checkbox"/> <a href="#">Kocuria sediminis strain FCS-11 16S ribosomal RNA gene, partial sequence</a>	1873	1873	99%	0.0	92%	<a href="#">NR_118222.1</a>
<input type="checkbox"/> <a href="#">Kocuria rhizophila strain TA68 16S ribosomal RNA gene, partial sequence</a>	1871	1871	99%	0.0	92%	<a href="#">NR_026452.1</a>
<input type="checkbox"/> <a href="#">Kocuria flava strain HO-9041 16S ribosomal RNA gene, partial sequence</a>	1869	1869	99%	0.0	92%	<a href="#">NR_044308.1</a>
<input type="checkbox"/> <a href="#">Kocuria turfanaensis strain HO-9042 16S ribosomal RNA gene, partial sequence</a>	1868	1868	99%	0.0	92%	<a href="#">NR_043899.1</a>
<input type="checkbox"/> <a href="#">Kocuria dechangensis strain NEAU-ST5-33 16S ribosomal RNA, partial sequence</a>	1866	1866	99%	0.0	92%	<a href="#">NR_137239.1</a>
<input type="checkbox"/> <a href="#">Kocuria polaris strain CMS 76or 16S ribosomal RNA gene, partial sequence</a>	1862	1862	99%	0.0	92%	<a href="#">NR_028924.1</a>
<input type="checkbox"/> <a href="#">Kocuria qwanqalliensis strain SJ2 16S ribosomal RNA gene, partial sequence</a>	1860	1860	99%	0.0	92%	<a href="#">NR_116266.1</a>
<input type="checkbox"/> <a href="#">Kocuria carniphila strain CCM 132 16S ribosomal RNA gene, partial sequence</a>	1860	1860	99%	0.0	92%	<a href="#">NR_027193.1</a>
<input type="checkbox"/> <a href="#">Kocuria salsicia strain 104 16S ribosomal RNA gene, partial sequence</a>	1855	1855	99%	0.0	91%	<a href="#">NR_117299.1</a>
<input type="checkbox"/> <a href="#">Kocuria varians strain G33 16S ribosomal RNA gene, partial sequence</a>	1855	1855	99%	0.0	91%	<a href="#">NR_029297.1</a>
<input type="checkbox"/> <a href="#">Kocuria aegyptia strain YIM 70003 16S ribosomal RNA gene, partial sequence</a>	1853	1853	99%	0.0	91%	<a href="#">NR_043511.1</a>
<input type="checkbox"/> <a href="#">Kocuria subflava strain YIM 13062 16S ribosomal RNA, partial sequence</a>	1844	1844	99%	0.0	91%	<a href="#">NR_144586.1</a>
<input type="checkbox"/> <a href="#">Kocuria arsenatis strain CM1E1 16S ribosomal RNA, partial sequence</a>	1842	1842	98%	0.0	92%	<a href="#">NR_148610.1</a>
<input type="checkbox"/> <a href="#">Kocuria varians strain ATCC 15306 16S ribosomal RNA gene, partial sequence</a>	1836	1836	96%	0.0	91%	<a href="#">NR_029297.1</a>
<input type="checkbox"/> <a href="#">Kocuria halotolerans strain YIM 90716 16S ribosomal RNA, complete sequence</a>	1834	1834	99%	0.0	91%	<a href="#">NR_029297.1</a>

Questions | comments