

# Isolation and antibiotic activity of actinomycetes recovered from Iranian deserts

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## Abstract

**Background:** Screening of actinomycetes for the production of novel antibiotics has been intensively evaluated for many years by scientists.

**Methods:** From Lout desert, Sistan and Balouchestan and Khuzestan deserts, 30 soil samples were collected. The actinomycetes from each sample were isolated and their antibiotic activities against pathogenic bacteria were investigated.

**Results:** A total of 300 actinomycetes isolates from soil samples were isolated. Out of 300 isolates, 24 isolates shown antimicrobial activity against *S. aureus*, *E. faecium*, *K. pneumonia* and *A. baumannii*.

**Conclusion:** The study indicated that desert soil had diverse group of actinomycetes which some of the isolates had broader spectrum antibacterial activity which showed potential as a source of antibiotics for pharmaceutical interest.

**Key Words:** Desert soil, actinomycetes, antibacterial activity

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