

Certificate of Analysis for HM-814

Actinomyces massiliensis, Strain F0489

Catalog No. HM-814

Product Description: Actinomyces massiliensis (A. massiliensis), strain F0489 was isolated in June 2008 from dental plaque of a 5-year-old female patient with caries in the United States.

Lot^{1,2}: 61881791 Manufacturing Date: 31JUL2013

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-positive rods	Gram-positive rods
Colony morphology ^{3,4}	Report results	Punctiform, white and rough (Figure 1A)
Colony morphology ⁵	Report results	Circular, convex, entire and white (Figure 1B)
Motility (wet mount)	Report results	Non-motile
Genotypic Analysis		
Sequencing of 16S ribosomal RNA gene (~ 1400 base pairs)	≥ 99% identical to GenBank AKFT01000126 (<i>A. massiliensis</i> , strain F0489)	≥ 99% identical to GenBank AKFT01000126 (<i>A. massiliensis</i> , strain F0489)
Viability (post-freeze) ³	Growth	Growth

Quality control of HMP material is only performed to demonstrate that the material distributed by BEI Resources is identical to the deposited material. It should not be considered a complete characterization of the deposited organism.

Figure 1A Figure 1B

Date: 18 DEC 2013

Signature:

Title: Technical Manager, BEI Authentication or designee

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²A. massiliensis, strain F0489 was deposited by Jacques Izard, Department of Molecular Genetics, The Forsyth Institute, Boston, Massachusetts, USA. HM-814 was produced by inoculation of the deposited material into Actinomyces broth and incubated for 24 hours at 37°C and anaerobic atmosphere (80% N₂:20% CO₂). The material from the initial growth was passaged once in Actinomyces broth for 24 hours at 37°C and anaerobic atmosphere to produce this lot. Purity of this lot was assessed for 7 days under propagation conditions.

³48 hours at 37°C and anaerobic atmosphere on Tryptic Soy agar with 5% defibrinated sheep blood

⁴Colonies were observed under anaerobic and aerobic with 5% CO₂ atmospheric conditions when HM-814 was grown on Tryptic Soy agar with 5% defibrinated sheep blood for 24 hours. The 16S gene of each colony type was sequenced, the sequence of both colonies were >99% identical and were consistent with *A. massiliensis*. Some strains of *A. massiliensis* are known to grow in an aerobic atmosphere with added CO₂ (Renvoise, A., D. Raoult and V. Roux. "Actinomyces massiliensis sp. nov., Isolated from a Patient Blood Culture." Int. J. Syst. Evol. Microbiol. 59 (2009): 540-544. PubMed: 19244437.).

⁵96 hours at 37°C and anaerobic atmosphere on Tryptic Soy agar with 5% defibrinated sheep blood