

Certificate of Analysis for NR-636

Yersinia pestis, Strain A1122

Catalog No. NR-636

This reagent is the property of the U.S. Government.

Product Description: Yersinia pestis (Y. pestis) is an aerobic, non-spore-forming, gram-negative rod-shaped bacterium. Y. pestis A1122 is an avirulent strain which contains the 110 kb and the 19 kb plasmids, but lacks the 70 kb plasmid that is essential for virulence as well as the unstable chromosomal pgm locus.

Manufacturing Date²: 16AUG2005 Lot¹: 4431717

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology Colony morphology ³ Congo red (CR) agar ⁴ Analytical profile index (API 20 E [®]) Conversion of nitrate to nitrite Fermentation of glycerol	Gram-negative rods Report results No red colonies Y. pestis Positive Negative	Gram-negative rods Circular, low convex, entire No red colonies Y. pestis Positive Negative
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 500 bp)	Consistent with <i>Y. pestis</i> Identical to GenBank AF282306	Consistent with <i>Y. pestis</i> ⁵ Identical to GenBank AF282306
Presence of Plasmid Confirmed by PCR Amplification of Plasmid-Specific Sequence from Extracted DNA 110 kb plasmid 19 kb plasmid	~ 1200 bp amplicon ~ 400 bp amplicon	~ 1200 bp amplicon ~ 400 bp amplicon
Viability (post-freeze) ³	Growth on agar	Growth on agar

Y. pestis, strain A1122 was deposited by the Centers for Disease Control and Prevention, Division of Vector-Borne Infectious Diseases. Fort Collins, Colorado. The deposited material was prepared by broth (Brain Heart Infusion) culture of a single colony isolated from the CDC Reference Collection stock. NR-636 was prepared by broth (Trypticase Soy Broth; BD 211768) culture of the deposited material.

Date: 26 AUG 2006 Signature: Signature on File

> Title: Technical Manager, BEI Authentication

ATCC[®], on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC®'s knowledge.

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²Note: The manufacturing date indicated on the vial is incorrect.

 $^{^3}$ 24 hours at 37 $^\circ$ C and aerobic atmosphere with 5% CO $_2$ on Trypticase Soy Agar with 5% Sheep Blood.

⁴7 days at 28°C and aerobic atmosphere on CR agar.

⁵Also consistent with other Yersinia species.