

***Bordetella pertussis*, Strain A639**

Catalog No. NR-58978

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Product Description:

Bordetella pertussis (*B. pertussis*), strain A639 was isolated in 1993 from a human with pertussis in the USA. Strain A639 was deposited as the homozygous wild-type genotype, which is susceptible to macrolide antibiotics. The deposited material was inoculated into Bordet-Gengou broth and grown for 6 days at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar with 5% defibrinated sheep blood and grown for 4 days at 37°C in an aerobic atmosphere, and the resulting subculture was vialled and frozen. NR-58978 was produced by inoculation of the frozen subculture into Bordet-Gengou broth and grown for 7 days at 37°C in an aerobic atmosphere with 5% CO₂. Broth inoculum was added to Bordet-Gengou agar kolles, which were grown for 7 days at 37°C in an aerobic atmosphere with 5% CO₂ to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

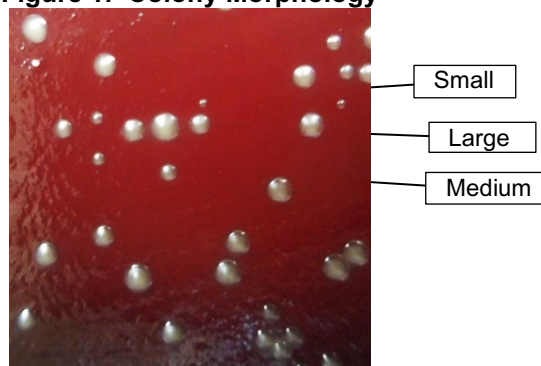
Lot: 70061064

Manufacturing Date: 18AUG2023

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology Colony morphology Motility (wet mount) VITEK® MS (MALDI-TOF)	Gram-negative bacilli Report results Report results <i>B. pertussis</i>	Gram-negative bacilli Circular, convex, entire, smooth and cream (Figure 1) ¹ Non-motile <i>B. pertussis</i> (99.9%)
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1410 base pairs)	≥ 99% sequence identity to <i>B. pertussis</i> , strain A639 (GenBank: CP046993.1)	100% sequence identity to <i>B. pertussis</i> , strain A639 (GenBank: CP046993.1)
Purity 7 days at 37°C in an aerobic atmosphere with and without 5% CO ₂ on Tryptic Soy agar with 5% defibrinated sheep blood	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
Viability	Growth	Growth

¹Three colony sizes (small, medium and large) were observed together on the agar growth performed in triplicate. VITEK® MS (MALDI-TOF) analysis identified cells from each colony size as *B. pertussis*. The 16S ribosomal RNA gene of each colony size was sequenced and found to be 100% sequence identity to the other colony size and to *B. pertussis*, strain A639 (GenBank: CP046993.1).

Figure 1: Colony Morphology



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