## **Certificate of Analysis**

## **Bacterial Strain JM109**

Part No.

P975A

Description: E. coli JM109 supplied in LB containing 10% glycerol. The cells are not competent cells.

 $\textbf{Genotype:} \ \textit{end} \texttt{A1,} \ \textit{rec} \texttt{A1,} \ \textit{gyr} \texttt{A96,} \ \textit{thi,} \ \textit{hsd} \texttt{R17} \ (\texttt{r}_{\texttt{k}}^-, \ \texttt{m}_{\texttt{k}}^+), \ \textit{rel} \texttt{A1,} \ \textit{sup} \texttt{E44,} \ \lambda^-, \ \Delta(\textit{lac-pro} \texttt{AB}), \ [\texttt{F'}, \ \textit{tra} \texttt{D36,} \ \textit{pro} \texttt{AB,} \ \textit{pr$ ladqZ∆M15].

Intended Uses: JM109 can be used as a host for most plasmid vectors including the pGEM® series. This strain is suitable for blue/white screening of vectors carrying the lacZ gene.

Maintenance: Maintain on minimal plates (M-9) containing 1mM thiamine-HCI to maintain the F' episome.

Storage Conditions: Store at -70°C. Avoid multiple freeze-thaw cycles or exposure to frequent temperature changes.

These fluctuations can greatly alter product stability. See the expiration date on the Product Information Label.

## **Quality Control Assays**

Antibiotic Sensitivity: JM109 cells are plated on LB agar plates containing one of the following antibiotics: ampicillin, tetracycline, kanamycin or chloramphenicol. No growth is observed on plates containing any of these antibiotics.

F Episome: The presence of the F episome is confirmed by growth on minimal medium (M9) containing 1mM

Genetic Markers: The presence of the gyrA96 mutation is confirmed by growth on nalidixic acid.

Microscopic Examination: The purity of this strain is verified visually by examination using Gram stain.

fler Wheeler

R. Wheeler, Quality Assurance

Bacterial Strain JM109, Glycerol Stock

**REF** P9751

500µI

LOT 0000309927 2024-03-31 Dispensed Lot#: 0000265689



For Research Use

Country of Origin: USA

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ADP9751 00003099270



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