

NBP2-26263 Protocol

Product Handling Protocol (NBP2-26263)

These cells are for research use only. Third party distribution of this cell line is discouraged, since this practice has resulted in the unintentional spreading of cells contaminated with microorganisms. Satisfactory results may not be obtained if the cell lines are obtained from a third party. To ensure the highest cell viability, it is strongly recommended that one should thaw the vial and initiate the cell culture as soon as possible upon receipt. If continued storage of the frozen vial upon receipt is necessary, it should be immediately stored in liquid nitrogen but not at -80C. Storage at -80C will lead to significant loss of cell viability. Please read the entire data sheet before thawing. It is recommended that users follow good tissue culture practice. The TLR4 cell line is sterile and all work should be performed under sterile conditions.

1. Prepare a sterile 15-ml tube with 9 ml fresh medium without selection agents pre-warmed at 37C.
2. Thaw the TLR4 cells quickly in a 37C water bath, keeping the cap portion out of the water to avoid any possible contamination.
3. Upon thawing, take the vial out of the water and clean it with 70% ethanol to decontaminate.
4. Transfer the cells to the 15-ml tube (Step 1) and mix with medium by gentle inversion of tube.
5. Centrifuge at 1,000 RPM for 5 minutes.
6. Remove supernatant and resuspend the TLR4 cell line pellet in 10 ml of fresh medium without selection agents. It is important to grow the TLR4 cells at this stage without any selection agents.
7. Transfer the TLR4 line into a 25-cm² tissue culture flask and incubate at 37C in a 95% air-5% CO₂ mixture.
8. After cells settle down (in 1-3 days), remove the medium and replace with fresh complete growth medium containing selection agents.
9. At 70-80% confluency, detach the TLR4 cells by trypsinization and split into new flasks with fresh complete growth medium.
10. Freeze the TLR4 cell line at $3-4 \times 10^6$ cells/ml per cryogenic vial. For optimal viability after freezing, freeze cells when they have reached log phase growth (95-98% confluency). Detach by trypsinization at 37C for 5 min, and harvest by mixing with 3 volumes of fresh medium followed by centrifugation (Step 5). Resuspend the pellet in freeze media (FBS with 10% DMSO). Add suspension to cryogenic vials in 1 ml aliquots. Place cryogenic vials, in a tissue culture approved cryogenic vial container, in -80C freezer for 24-48 hours. After 24-48 hours, move the vials into liquid nitrogen storage.