chemQ bioscience Product Information

NG5A CryoPreserv; Catalog Number: CQ-NCP-100; Volume: 100 mL

NG5A CryoPreserv is shipped at a cold temperature. Store at 2°-8°C away from direct light. NG5A CryoPreserv is for research use or for further manufacturing. To order this item, please contact us at info@vitroprep.com.

NG5A CryoPreserv Usage and Cryopreservation Protocol:

a. NG5A CryoPreserv is a ready-to-use solution with 10% USP grade DMSO. Do not add any DMSO or additives to this medium. Store at 2°-8°C away from light.
b. Follow your internal Cryopreservation SOP to determine cell density during freezing. If freezing the cells at 10 × 10^6 cells/mL, divide the total live cell yield by 10 to determine the final volume of NG5A CryoPreserv to add. Example: 542 × 10^6 live cells = 54 mL of NG5A CryoPreserv (final volume prior to aliquoting into cryovials).
c. Transfer the cell suspension to conical centrifuge tubes and spin the cells out of any media. The centrifuge should be pre-chilled to 4°C before spinning.
d. Aspirate the entire supernatant carefully, taking care not to disrupt the cell pellet.
e. Add just enough NG5A CryoPreserv (pre-chilled to 0°-4°C) to cover the pellet, then gently resuspend the pellet using a rocking motion.
f. It is recommended to resuspend the cells in NG5A CryoPreserv using a nutating platform placed inside a 0°-4°C refrigerator. The cells should stay as cold as possible once exposed to NG5A CryoPreserv.
g. Once resuspended, add pre-chilled NG5A CryoPreserv to the final desired volume (established above). Mix the suspension thoroughly and then distribute into the cryovials and freeze.
h. Controlled-rate freezing (-1°C/min) and post-freeze long-term storage in vapor phase LN2 is recommended.

Thawing Protocol for a 1 mL Sample in a 2 mL Cryovial Using Thaw Medium:

a. Pre-warm a water bath to 37°C.
b. Thaw medium should be in a 50 mL conical vial on wet ice and should be open and ready prior to thawing the vial of cells. The minimum dilution ratio is 10:1 (thaw medium volume to sample volume).
c. Remove the cryovial from the LN2 shipping container, LN2 Dewar, or dry ice just before thawing.
d. Immediately dip the vial into the 37°C water bath to a depth that submerges the frozen cell suspension, but does not submerge the vial cap.
e. Gently shake the vial and leave submerged for ~60–90 seconds, checking often to observe the state of thawing. The vial should be removed once an ice spindle is visible in the center of the cryovial. Do not allow the cell suspension to thaw completely.
f. Once thawed, immediately transfer the vial to a Biosafety Cabinet and dump or pipette the suspension into cold thaw medium. Rinse the vial to collect any cells that may be left behind. Thaw medium should be in a 50 mL conical vial on wet ice.
g. Using a pre-chilled 4°C centrifuge, spin the cells. Centrifuge speed and time to remove the cells from thaw medium will depend on species, vendor, etc.
h. Aspirate the supernatant carefully, taking care not to disrupt the resulting pellet.
i. Resuspend the cells in plating or maintenance media (depending on your assay conditions).
