Product description

N_N20R1 is a subpopulation of the NGP neuroblastoma line which is resistant to 20 μM Nutlin-3. The parental line NGP was derived from a metastatic site in the lung.

Name: N_N20R1 Cell Line

Cancer type: Brain cancer

Cancers detailed: Neuroblastoma

Organism: Human

Tissue: Lung metastases

Growth properties: Adherent

Model: Cancer cell line

Conditional: No

CRISPR edited: No

Production details: Resistant cell lines were established by exposing NGP cells to Nutlin-3. Single cell derived colonies were isolated with cloning cylinders and the clonal population expanded in culture medium containing the MDM2/p53 antagonist refreshed weekly for 60 days. Stage 1 resistant clones were then further exposed to increased concentrations of Nutlin-3 for 30 days to generate stage 2 resistant clones.

Cellosaurus ID: CVCL_HG08

Contributor(s)

Inventor: John Lunec
Institute: Newcastle University

Properties

Product format: Frozen

Unpacking and storage:

1. Check all containers for leakage or breakage.
2. Remove the frozen cells from the dry ice packaging and immediately place the cells at a temperature below -130°C, preferably in liquid nitrogen vapor, until ready for use.

Recommended medium: DMEM + 10% Heat Inactivated FBS

Subculture: Split sub-confluent cultures (70-80%) 1:3 to 1:6 i.e. seeding at 25x10⁴ cells/cm² using 0.05% trypsin/EDTA solution. Cells are passaged every 3 to 4 days.

Cryopreservation medium: Foetal Bovine Serum (FBS) 90% and DMSO 10%

Culture conditions: 37.0°C ± 1.0°C incubator with 5.0% ± 1.0% CO_2

Handling instructions

Thawing:

1. Please ensure that vials are frozen when received, and store at **<-130 °C long term**. When removing frozen cells from storage, it is important to minimize exposure to room temperature (15 - 25°C). If not proceeding directly to thawing, place the cells on dry ice or in a liquid nitrogen container.
2. **Do not thaw at room temperature.** To thaw, swirl the vial quickly in a 37 °C water bath with O-ring and cap above the water to avoid contamination. Remove from the water bath when the **ice crystals are slightly dissolved** and wipe the exterior with 70% ethanol or isopropanol before transferring to a biosafety cabinet. Further steps should be conducted under aseptic conditions.
3. We strongly recommend that the volume of cell suspension is measured at this point, and a 20 uL aliquot be removed for a **viable cell count** using trypan blue or similar dye. This ensures that provided cells are viable, and the cell count can be used to determine volume of growth medium to be added to the cell suspension.
4. Add the cell suspension to prewarmed culture medium in a 15 mL tube, dropwise, to minimize shock.
5. Repeat until the ice crystals have been completely dissolved.
6. Centrifuge for 5 min at 250 g and discard the supernatant. Resuspend in complete medium and transfer to culture flasks.

References

- Drummond et al. 2016. Oncotarget: PMID: 27323823

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: N_N20R1 Cell Line, was invented by John Lunec at the Newcastle University (CancerTools #152840).