Product sheet

GH3 Cells | 300383

General information

Description	GH3 is an epithelial-like cell that was isolated in 1965 from the pituitary gland of a female rat with a tumor. GH3 cells have been found to produce more growth hormone than GH1 cells and also produce prolactin. Hydrocortisone stimulates growth hormone production and inhibits prolactin production.
Organism	Rat
Tissue	Brain, Pituitary gland
Disease	Neoplasm
Synonyms	GH 3

Characteristics

Age	7 months
Gender	Female
Morphology	Epithelial-like
Growth properties	Adherent, clusters in suspension

Identifiers / Biosafety / Citation

Citation	GH3 (Cytion catalog number 300383)
Biosafety level	1

Expression / Mutation

Products	growth hormone, prolactin

Handling

Culture Medium	Ham's F12, w: 1.0 mM stable Glutamine, w: 1.0 mM Sodium pyruvate, w: 1.1 g/L NaHCO3 (Cytion article number 820600a)

Medium supplements	Supplement the medium with 15% horse serum, 2.5% heat-inactivated FBS
Passaging solution	Accutase
Subculturing	Collect suspension cells in a 15 ml tube and carefully rinse the adherent cells using PBS without calcium and magnesium (3-5 ml PBS for T25, 5-10ml for T75 cell culture flasks). Add Accutase (1-2ml per T25, 2.5ml per T75 cell culture flask), the cell sheet must be covered completely. Incubate at ambient temperature for 10 minutes, then centrifuge the cells growing in suspension and the adherent cells together. Carefully resuspend the cells and dispense into new flasks which contain fresh medium.
Freeze medium	CM-1 (Cytion catalog number 800100) or CM-ACF (Cytion catalog number 806100)
Handling of cryopreserved cultures	GH3 cells are shipped in a deep-frozen state on dry ice. Upon receipt, confirm that the vial remains frozen. For storage, place the cryovial immediately at temperatures below -150 degrees. If you plan to culture the cells immediately, swiftly thaw the vial by shaking it in a 37 degrees water bath with clean water and an antimicrobial agent for 40-60 seconds. Remove the vial once a small ice clump persists, ensuring it remains cold. Proceed with all subsequent steps under aseptic conditions. In a sterile flow hood, disinfect the cryovial with 70% ethanol. Then, gently open the vial and transfer the cell suspension into a 15 ml centrifuge tube pre-filled with 8 ml of room temperature culture medium. Gently mix the cells. For cell separation, centrifuge at 300 x g for 3 minutes and dispose of the supernatant. Skipping centrifugation is optional, although any residual freezing medium should be removed after 24 hours. Resuspend the pellet gently in 10 ml of fresh culture medium and divide between two T25 culture flasks. Follow the subculture protocol for subsequent steps.
Handling of proliferating cultures	One or two cell culture flasks come filled with cell culture medium. Collect the entire medium in a 50 ml centrifuge tube. Spin down the collected medium at 300 x g for 3 minutes to collect the cells which may have detached during transit. If a cell pellet is visible, resuspend the cells in 5 ml of cell culture medium and transfer to a T25 cell culture flask. Carefully add 5 ml of cell culture medium to each T25 cell culture flask. Examine cell morphology and confluency using a microscope. Finally, incubate the flasks at 37 degrees Celsius for at least 24 hours.

Quality control / Genetic profile / HLA

Sterility	Mycoplasma contamination is rigorously excluded using both PCR-based assays and luminescence-based mycoplasma detection methods. To ensure there is no bacterial, fungal, or yeast contamination, cell cultures are subjected to daily visual inspections.