

### **General information**

| Organism | Human                 |
|----------|-----------------------|
| Tissue   | Brain                 |
| Disease  | Astrocytoma, grade IV |
| Synonyms | CCFSTTG1, STTG1       |

### Characteristics

| Age                  | 68 years           |
|----------------------|--------------------|
| Gender               | Female             |
| Ethnicity            | Caucasian          |
| Morphology           | Long, bright cells |
| Growth<br>properties | Adherent           |

# Identifiers / Biosafety / Citation

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Citation CCF-STTG1 (Cytion catalog number 300388)

Biosafety level

### **Expression / Mutation**

AntigenHLA DR (on approx. 25% of cells)expression

### Handling

| Culture | RPMI 1640, w: 2.1 mM stable Glutamine, w: 2.0 g/L NaHCO3 (Cytion article number 820700a) |
|---------|--|
| Medium  |  |



| Medium<br>supplements | Supplement the medium with 10% FBS   |
|-----------------------|--|
| Passaging solution    | Accutase   |
| Subculturing          | Remove the old medium from the adherent cells and wash them with PBS that lacks calcium and magnesium.<br>For T25 flasks, use 3-5 ml of PBS, and for T75 flasks, use 5-10 ml. Then, cover the cells completely with Accutase,<br>using 1-2 ml for T25 flasks and 2.5 ml for T75 flasks. Let the cells incubate at room temperature for 8-10 minutes<br>to detach them. After incubation, gently mix the cells with 10 ml of medium to resuspend them, then centrifuge<br>at 300xg for 3 minutes. Discard the supernatant, resuspend the cells in fresh medium, and transfer them into<br>new flasks that already contain fresh medium. |
| Split ratio           | A ratio of 1:3 to 1:8 is recommended   |
| Seeding<br>density    | 2 x 10^4 cells/cm^2 will result in a confluent monolayer within 4 days.  |
| Fluid renewal         | 2 to 3 times per week  |
| Freezing<br>recovery  | After thawing, plate the cells at 5 x 10^4 cells/cm^2 and allow the cells to recover from the freezing process and to adhere for at least 24 hours.  |
| Freeze<br>medium      | CM-1 (Cytion catalog number 800100) or CM-ACF (Cytion catalog number 806100)   |



| Handling of<br>cryopreserved<br>cultures | <ol> <li>Confirm that the vial remains deeply frozen upon delivery, as cells are shipped on dry ice to maintain<br/>optimal temperatures during transit.</li> </ol>  |
|--|--|
|  | 2. Upon receipt, either store the cryovial immediately at temperatures below -150?C to ensure the preservation of cellular integrity, or proceed to step 3 if immediate culturing is required.   |
|  | 3. For immediate culturing, swiftly thaw the vial by immersing it in a 37?C water bath with clean water and an antimicrobial agent, agitating gently for 40-60 seconds until a small ice clump remains.  |
|  | 4. Perform all subsequent steps under sterile conditions in a flow hood, disinfecting the cryovial with 70% ethanol before opening.  |
|  | 5. Carefully open the disinfected vial and transfer the cell suspension into a 15 ml centrifuge tube containing 8 ml of room-temperature culture medium, mixing gently.  |
|  | 6. Centrifuge the mixture at 300 x g for 3 minutes to separate the cells and carefully discard the supernatant containing residual freezing medium. Optionally, skip centrifugation but remove any remaining freezing medium after 24 hours.   |
|  | <ol> <li>Gently resuspend the cell pellet in 10 ml of fresh culture medium. For adherent cells, divide the<br/>suspension between two T25 culture flasks; for suspension cultures, transfer all the medium into one<br/>T25 flask to promote effective cell interaction and growth.</li> </ol> |
|  | 8. Adhere to established subculture protocols for continued growth and maintenance of the cell line, ensuring reliable experimental outcomes.  |

### Quality control / Genetic profile / HLA

#### Sterility

Mycoplasma contamination is 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.



| STR profile | Amelogenin: x,x<br>CSF1P0: 12<br>D13S317: 11,13<br>D16S539: 11,12<br>D5S818: 12,13<br>D7S820: 10,11<br>TH01: 7,8<br>TPOX: 8,11<br>vWA: 17<br>D3S1358: 16,17<br>D21S11: 28,29<br>D18S51: 15<br>Penta E: 10<br>Penta D: 11,13<br>D8S1179: 13,14<br>FGA: 20,22 |
|-------------|---|
| HLA alleles | A*: 01:01:01<br>B*: 08:01:01, 37:01:01<br>C*: 06:02:01, 07:01:01<br>DRB1*: 07:01:01, 13:02:01<br>DQA1*: 01:02:01, 02:01:01<br>DQB1*: 03:03:02, 06:04:01<br>DPB1*: 04:01:01<br>E: 01:01:01   |