**Designation:** U-343 MG  
**CLS order number:** Cryovial: 300365  
Vital: 330365

### Origin and General Characteristics

<table>
<thead>
<tr>
<th>Depositor</th>
<th>Senner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organism</td>
<td>Homo sapiens (human)</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
</tr>
<tr>
<td>Tissue</td>
<td>Brain</td>
</tr>
<tr>
<td>Morphology</td>
<td>epithelial</td>
</tr>
<tr>
<td>Cell type</td>
<td>Glioblastoma</td>
</tr>
<tr>
<td>Growth Properties</td>
<td>Monolayer, adherent</td>
</tr>
</tbody>
</table>

**Description:** Comparison of STR-data has revealed, that the STR-profile of U-343 MGa cells stored at CLS is identical to GOS-3 described by DSMZ, Braunschweig. However, CLS' morphological data clearly show, that the U-343 MG stock at CLS has the same morphology as one of the subclones of U-343 MGa which have been described by Nister, Heldin and Westermark in 1986. We aim to clarify this problem as soon as possible.

### Culture Conditions and Handling

<table>
<thead>
<tr>
<th>Culture Medium</th>
<th>Minimum essential medium Eagle (Earle's BSS) supplemented with 2 mM L-glutamine, 0.1 mM non-essential amino acids (NEAA), 1.0 mM sodium pyruvate, and 10% fetal bovine serum (MG-10, CLS order number 820100).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subculturing</td>
<td>Remove medium and 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 T75, 2-5ml per T75 cell culture flask), the cell sheet must be covered completely. Incubate at ambient temperature for 10 minutes. Carefully resuspend the cells with medium (10 ml), centrifuge for 5 min at 300xg, resuspend cells in fresh medium and dispense into new flasks which contain fresh medium.</td>
</tr>
<tr>
<td>Split Ratio</td>
<td>A ratio of 1:2 to 1:5 is recommended</td>
</tr>
<tr>
<td>Seeding density</td>
<td>2x10^4 cells/cm^2</td>
</tr>
<tr>
<td>Fluid Renewal</td>
<td>2 to 3 times weekly</td>
</tr>
<tr>
<td>Freeze Medium</td>
<td>CM-1 (CLS order number 800150, 50ml)</td>
</tr>
</tbody>
</table>

**Sterility:** Fluorescence (DAPI) test: negative; Mycoplasma specific PCR: negative

**Biosafety Level:** 1

### Special Features of the Cell Line

- **Tumorigenic:** Yes, in nude mice
- **Receptors expressed:** GFAP: 95% of the cells tested positive.
- **DNA Profile (STR):**
  - Amelogenin: X,Y: vWA: 17,18
  - CSF1PO: 10,12
  - D13S317: 9,13
  - D16S539: 9,12
  - D5S818: 12,13
  - D7S820: 9,11
  - THO1: 6,9,3
  - TPOX: 8,9
  - CSF1PO: 10,12
  - D13S317: 9,13
  - D16S539: 9,12
  - D5S818: 12,13
  - D7S820: 9,11
  - THO1: 6,9,3
  - TPOX: 8,9
  - CSF1PO: 10,12
  - D13S317: 9,13
  - D16S539: 9,12
  - D5S818: 12,13
  - D7S820: 9,11
  - THO1: 6,9,3
  - TPOX: 8,9

**References:**
Recommendations for handling of adherent cell cultures following delivery

Cryopreserved cells
If immediate culturing is not intended, the cryovial(s) must be stored in liquid nitrogen (−196°C) or at least at −80°C after arrival.

If immediate culturing is intended, please follow these instructions:
Quickly thaw by rapid agitation in a 37°C water bath within 40-60 seconds. The water bath should have clean water containing an antifungal agent. As soon as the sample has thawed, remove the cryovial from the water bath. Note: A small ice clump should still remain and the vial should still be cold.
From now on, all operations should be carried out under aseptic conditions.
Transfer the cryovial to a sterile flow cabinet and wipe with 70% alcohol. Carefully open the vial and transfer the cell suspension into a 15 ml centrifuge tube containing 8 ml of culture medium (room temperature). Resuspend the cells carefully. Centrifuge at 300xg for 3 min and discard the supernatant. The centrifugation step may be omitted, but in this case the remains of the freeze medium have to be removed 24 hours later. Resuspend the cells carefully in 10ml fresh cell culture medium and transfer them into two T25 cell culture flasks. All further steps are described in the Subculture section.

Proliferating Cultures
The cell culture flasks are completely filled with cell culture medium to prevent loss of cells during transit.
Remove the entire medium except for a sufficient volume to cover the floor of the flask. Incubate at 37°C for 24 hrs.
Sometimes the cultures are handled roughly during transit, and most of the cells detach and float in the culture medium. If this has occurred remove the entire content of the flask and centrifuge at 300x g for 3 minutes. Take off the supernatant, resuspend the cells in 10 ml of culture medium and transfer the entire cell suspension into cell culture flasks of suitable size (do not seed in more than 1T75 flask).

Safety precautions for frozen cell lines
If the cryovial is planned to be stored in liquid nitrogen and to be thawed in the future, special safety precautions should be followed:

- Protective gloves and clothing should be used and a facemask or safety goggles must be worn when storing and/or thawing the cryovial.
- The removal of a cryovial from liquid nitrogen can result in the explosion of the cryovial creating flying fragments.