

**U-251 MG/TMZ-Luc Cells | 305705**

<b>Organism</b>	Human
<b>Tissue</b>	Brain
<b>Disease</b>	Astrocytoma
<b>Synonyms</b>	U-251MG, U-251-MG, U-251_MG, U251-MG, U251MG, U-251, U251, U251n, U251N, 251 MG, 251MG
<b>Age</b>	75 years
<b>Gender</b>	Male
<b>Ethnicity</b>	Caucasian
<b>Morphology</b>	Epithelial-like
<b>Growth properties</b>	Adherent
<b>Citation</b>	U251MG/TMZ-Luc (Cytion catalog number 305705)
<b>Biosafety level</b>	1
<b>NCBI_TaxID</b>	9606
<b>GMO Status</b>	GMO-S1: This U-251 MG temozolomide-resistant glioblastoma line contains a-Luc construct enabling bioluminescent monitoring of drug resistance. This classification applies only within Germany and may differ elsewhere.
<b>Protein expression</b>	Luc
<b>Tumorigenic</b>	SMRV: Negative, as confirmed by Real-Time PCR

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**Mutational profile**      TMZ-resistant

**Culture Medium**      DMEM

**Freeze medium**      As a cryopreservation medium, we use complete growth medium + 10% DMSO for adequate post-thaw viability.

### Thawing and Culturing Cells

1. Confirm that the vial remains deeply frozen upon delivery, as cells are shipped on dry ice to maintain optimal temperatures during transit.
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 200 x g for 5 minutes, carefully discard the supernatant containing freezing medium.
7. Follow the procedure described under Post-Thaw Recovery

**Incubation Atmosphere**      37°C, 5% CO<sub>2</sub>, humidified atmosphere.

**Shipping Conditions**      Cryopreserved cell lines are shipped on dry ice in validated, insulated packaging with sufficient refrigerant to maintain approximately -78 °C throughout transit. On receipt, inspect the container immediately and transfer vials without delay to appropriate storage.

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### Storage Conditions

For long-term preservation, place vials in vapor-phase liquid nitrogen at about  $-150$  to  $-196$  °C. Storage at  $-80$  °C is acceptable only as a short interim step before transfer to liquid nitrogen.

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