**Product sheet**

# A875 Cells | 305099

## General information

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|---|---|
| **Description** | The A875 cell line is a human melanoma cell line derived from a metastatic site in a 40-year-old female. Exhibiting morphological and growth characteristics typical of malignant melanoma, A875 has been extensively utilized in oncological research, particularly focusing on melanoma biology, mechanisms of metastasis, and therapeutic resistance. This cell line is characterized by its aggressive growth and metastatic potential, making it an excellent model for in vivo tumor growth and metastasis studies in xenograft settings.<br><br>A875 cells are particularly valuable for investigating the molecular and genetic underpinnings of melanoma progression. Research involving this cell line includes studies on the roles of oncogenes, tumor suppressor genes, and various signaling pathways that are pivotal in cancer development and progression. The cell line has been used in the assessment of novel chemotherapeutic agents and targeted therapies, benefiting from its genetic alterations that mimic those found in human melanomas. Furthermore, A875 serves as a key model for evaluating immune response mechanisms to melanoma, due to its ability to elicit strong immune reactions, thus aiding in the development and testing of new immunotherapies. |
| **Organism** | Human |
| **Tissue** | Skin |
| **Disease** | Melanoma |
| **Synonyms** | A-875 |

## Characteristics

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| **Age** | 40 years |
| **Gender** | Female |
| **Morphology** | Polygonal |
| **Growth properties** | Adherent |

## Identifiers / Biosafety / Citation

| | |
|---|---|
| **Citation** | A875 (Cytion catalog number 305099) |
| **Biosafety level** | 1 |

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## Expression / Mutation

## Handling

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|---|---|
| **Culture Medium** | DMEM, w: 4.5 g/L Glucose, w: 4 mM L-Glutamine, w: 1.5 g/L NaHCO3, w: 1.0 mM Sodium pyruvate (Cytion article number 820300a) |
| **Medium 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. For T25 flasks, use 3-5 ml of PBS, and for T75 flasks, use 5-10 ml. Then, cover the cells completely with Accutase, 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 to detach them. After incubation, gently mix the cells with 10 ml of medium to resuspend them, then centrifuge at 300xg for 3 minutes. Discard the supernatant, resuspend the cells in fresh medium, and transfer them into new flasks that already contain fresh medium. |
| **Split ratio** | 1:2 to 1:4 |
| **Fluid renewal** | 2 to 3 times per week |
| **Freeze medium** | CM-1 (Cytion catalog number 800100) |

**Handling of cryopreserved cultures**

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 300 x g for 3 minutes to separate the cells and carefully discard the supernatant containing residual freezing medium.
7. Gently resuspend the cell pellet in 10 ml of fresh culture medium. For adherent cells, divide the suspension between two T25 culture flasks; for suspension cultures, transfer all the medium into one T25 flask to promote effective cell interaction and growth.
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.