

The Cell Line Provenance Checklist

How confident are you in the provenance of your cell lines?

Cell line authentication is an important part of research quality, but provenance goes beyond identity verification. Use this checklist to assess how much you know about the origin, history and traceability of the models used in your research.

Source & origin

- ☐ I can identify the original source of my cell line.
- ☐ I know where and when the cell line was first established.
- ☐ I have documentation confirming how the model was acquired.
- ☐ I can trace the chain of custody from source to my laboratory.

Authentication

- ☐ The cell line has been authenticated within the recommended timeframe.
- ☐ Authentication records are readily available and up to date.
- ☐ Authentication documentation is stored alongside experimental records.

Documentation & records

- ☐ Passage history is documented and accessible.
- ☐ Key handling and culture conditions are recorded.
- ☐ Storage and recovery procedures are documented.
- ☐ Another researcher could understand the model history using the available records.

Reproducibility & risk

- ☐ I am confident another researcher could obtain the same source material.
- ☐ I can clearly describe the provenance of the model in publications or reports.
- ☐ I would feel confident defending the provenance of this model during peer review.
- ☐ I understand any limitations or gaps in the model's provenance history.

Future research

- ☐ Provenance information would remain accessible if a team member left the lab.
- ☐ Records are stored in a way that supports future collaboration.
- ☐ The model's history could be understood by researchers outside of my immediate team.

Your score

15–18 ticks: Excellent.

You have strong visibility and traceability across the full lifecycle of your model.

10–14 ticks: Good foundation.

There may be opportunities to improve documentation and future reproducibility.

Below 10 ticks: Potential risk area.

Missing provenance information can introduce uncertainty into research outcomes and make future reproducibility more challenging.

Why provenance matters

Provenance is more than documentation.

It provides confidence in the origin, history and stewardship of research models, helping researchers strengthen reproducibility, reduce uncertainty and make better-informed scientific decisions.

At CancerTools, we believe confidence starts at the source.