

Cell Line Identity and Verification

Why?

- Authentication of human cell lines is now required by many journals and funding agencies.
- Working on misidentified cell lines can lead to invalidation of published data and lost time, money and effort.
- It is estimated that 15 – 20% of cancer research publications are based on work using misidentified cell lines ¹.

Current Journals Requiring Some level of Cell Line Authentication before acceptance:

BioTechniques

AACR Journals

- Cancer Discovery
- Cancer Research
- Cancer Prevention Research
- Clinical Cancer Research
- Cancer Epidemiology, Biomarkers & Prevention
- Molecular Cancer Therapeutics
- Molecular Cancer Research

Cell Biochemistry and Biophysics

International Journal of Cancer

In Vitro Cellular & Developmental Biology – Animal

- Nature Publishing Group
- Nature Reviews Molecular Cell Biology
- Nature
- Nature Genetics
- Nature Reviews Immunology
- Nature Reviews Cancer
- Nature Reviews Neuroscience
- Nature Biotechnology

Oxford Journals:

- Carcinogenesis

How:

TC can send human cell lines to the ECACC for short tandem repeat (STR) profiling

- This provides a profile of the cell line which is then compared with those already in the ECACC database and a further 2700 profiles in an international online database.
- The chances of two unrelated human cell lines having the same STR profile are extremely low.

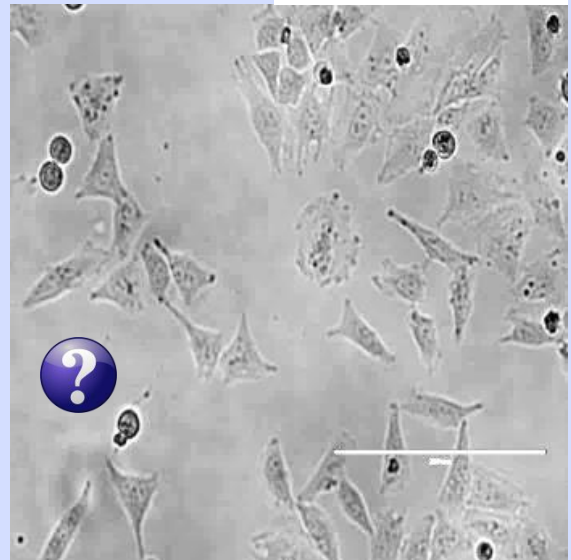
Cost:

- £95/cell line +P&P

When:

- STR testing is recommended upon receipt of a new cell line and at regular intervals between passages.

N/B: TC have a number of cell lines obtained directly from cell repositories, please ask full a list of those available.



1) Freshney R. I. (2010) Database of misidentified cell lines. *Int J Cancer*. 126: 302-04