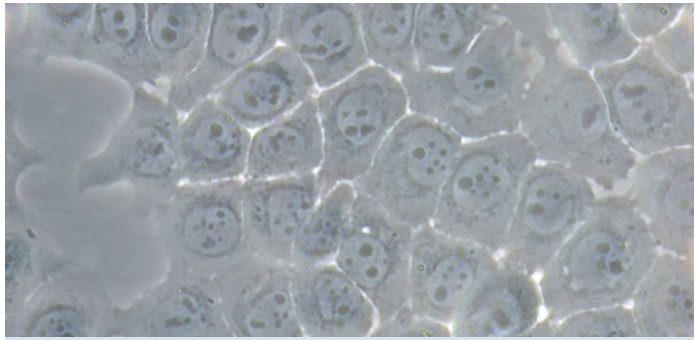

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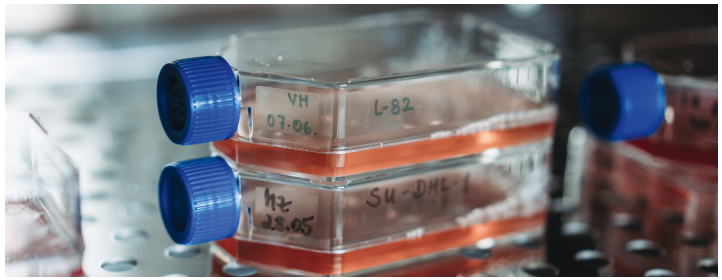
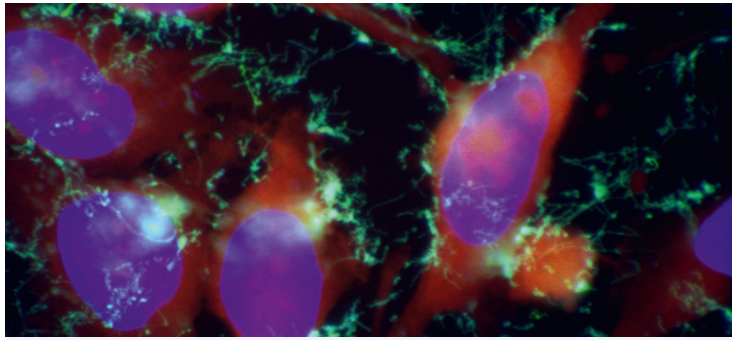
DSMZ

home of more than 84,000 biological resources

HUMAN AND ANIMAL CELL LINES

Services



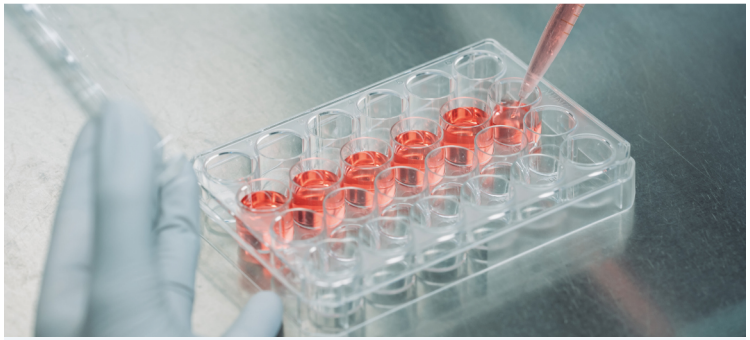


BACKGROUND

Human and animal cell cultures represent important tools for experimental research, production of bioactive agents and therapeutic medical applications. To serve as reliable tools leading to reproducible results stringent quality control of these bioresources are mandatory. Contamination with mycoplasma or viruses and the use of cross-contaminated (mix-up of different cell lines) or misidentified cell lines often remain undiscovered for a long period in research and applied cell culture.

The use of false or contaminated cell lines can be detrimental for a research project or the purity and safety of cell culture products.

Based on our extensive experience with cell cultures, we set up the necessary techniques for thorough quality control of cell lines and we offer these techniques as services to all users of cell cultures.



Services and Techniques

- **Online STR Analysis**

The DSMZ, together with the ATCC, JCRB and RIKEN repositories, have generated comprehensive databases of short tandem repeats (STR) cell line profiles. Use of a consensus STR panel now enables multi-center interactive searches online to authenticate human cell cultures.
https://celldive.dsmz.de/str

- **Authentication of Human Cell Lines**

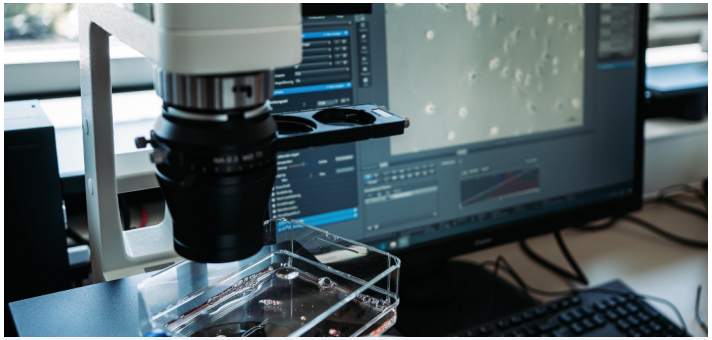
To let researchers check the identity of their cell lines – a requirement increasingly imposed by scientific journals and funding agencies – the DSMZ offers an authentication service for human cell lines based on STR-DNA typing according to the global standard ANSI/ATCC ASN-0002-2021.

- **Animal Cell Line Species Identification**

Today verification of animal species relies on a rapid and accurate identification technique of animal cell lines by DNA Barcoding of Cytochrome C Oxidase I (COI).
DNA barcodes are now available for numerous taxa including species of insects, fish, amphibia, birds and mammals.
https://celldive.dsmz.de/coi

- **Mycoplasma Detection**

We offer testing of cell cultures for the presence of mycoplasmas by the highly sensitive assays broth-agar microbiological culture and PCR.



- **Mycoplasma Elimination**

To eradicate mycoplasmas from irreplaceable cell cultures the Department of Human and Animal Cell Lines offers to treat contaminated cell cultures with different antibiotics in parallel approaches. If curation is successful, cured cultures will be shipped back to you.

- **Virus Testing**

Regulatory agencies might request assessment and categorisation of cell cultures with respect to biological safety levels. To that end, the DSMZ offers to demonstrate the presence of absence of selected human pathogenic viruses which are relevant for cell culture technology with full documentation.

- **Safe Deposit of Human and Animal Cell Lines**

The DSMZ offers storage of ampoules with human or animal cell cultures up to biosafety level 2 in liquid nitrogen in confidentiality.

For more detailed information on the methods applied, on the material to be delivered for the tests and for downloading submission forms, please refer to our website:

Authentication, mycoplasma and virus:
www.dsmz.de/services/human-and-animal-cell-lines

Safe deposit:
www.dsmz.de/collection/deposit/safe-deposit/human-and-animal-cell-lines