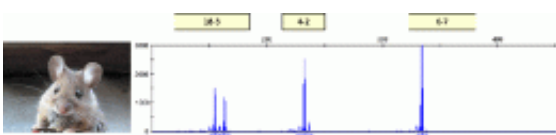


Researchers: How are you authenticating your non-human cell lines?

January 28 2013



Left: Mouse. Right: Proof of mouse cell line.

For human cells, researchers have adopted [practices that are currently used for human identification](#), which are based on the detection of short tandem repeat (STR) markers. For the large volume of research that is performed using non-human cell lines (mouse, hamster, monkey, etc.), there are no STR marker assays that are able to uniquely and unequivocally identify a particular cell line.

Researchers found a series of STR markers that uniquely identify and distinguish African green monkey and mouse cell lines. The conditions using multiple labeled primers targeting the STR regions have been optimized, and several widely used cell lines have been genotyped using the assay.

NIST is currently working on an assay for Chinese hamster [ovary](#) (CHO) cell authentication and encourages any entity that is interested in kit development to contact us.

More information: Almeida, J., Hill, C. and Cole, K. Authentication of African green monkey cell lines using human short tandem repeat markers. *BMC Biotechnology* 2011, 11:102. www.nist.gov/manuscript-public...ch.cfm?pub_id=908945

Provided by National Institute of Standards and Technology

Citation: Researchers: How are you authenticating your non-human cell lines? (2013, January 28) retrieved 20 April 2024 from

<https://phys.org/news/2013-01-authenticating-non-human-cell-lines.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.