Research Tools

HLF-VC1 Master Cell Bank for Vaccine Development

WARF: P160170US01

Inventors: James Gern

The Wisconsin Alumni Research Foundation (WARF) is seeking commercial partners interested in a master cell bank of human fetal fibroblasts that have been extensively characterized and are FDA-qualified for virus production.

Overview

FDA-qualified cell lines must be used for virus production for human vaccines. There are relatively few of these lines available and several (WI-38, MRC-5) used for virus production are becoming senescent. Due to current and potential restrictions, fetal tissue-derived lines are not being replaced as they senesce.

The Invention

UW–Madison researchers have developed a master cell bank of HLF-VC1 cells (primary human fetal pulmonary fibroblasts) for commercial use as a substrate for the production of viral vaccines. The cells were first isolated by the State Laboratory of Hygiene (SLH) in 1968 and have been used extensively by SLH in viral diagnostic laboratories to isolate viruses from clinical specimens. The cells also have been used to grow rhinoviruses for inoculation studies. They have been subjected to testing as recommended by the FDA for use in vaccine production or experimental inoculation studies, and are free from extraneous contaminants.

Applications

- Viral vaccine production and research tool

Key Benefits

- Available as a biomaterial
- FDA-qualified
- Extensively characterized
- Isolated prior to HIV and prions

Stage of Development

The HLF-VC1 cells were originally cryopreserved in 1968; in 2003 they were thawed to produce a master cell bank. Defined reagents and procedures were used in the production of the cell bank, with the goal of developing a cell line suitable for the production of viruses or vaccines for human use. In 2009 the cells were used to produce a recombinant rhinovirus inoculum, which was granted an FDA IND for a study using human volunteers.

Additional Information

For More Information About the Inventors

- James Gern

Tech Fields

- Research Tools : Cell lines
- Therapeutics & Vaccines : Vaccines

For current licensing status, please contact Jennifer Gottwald at jennifer@warf.org or 608-960-9854