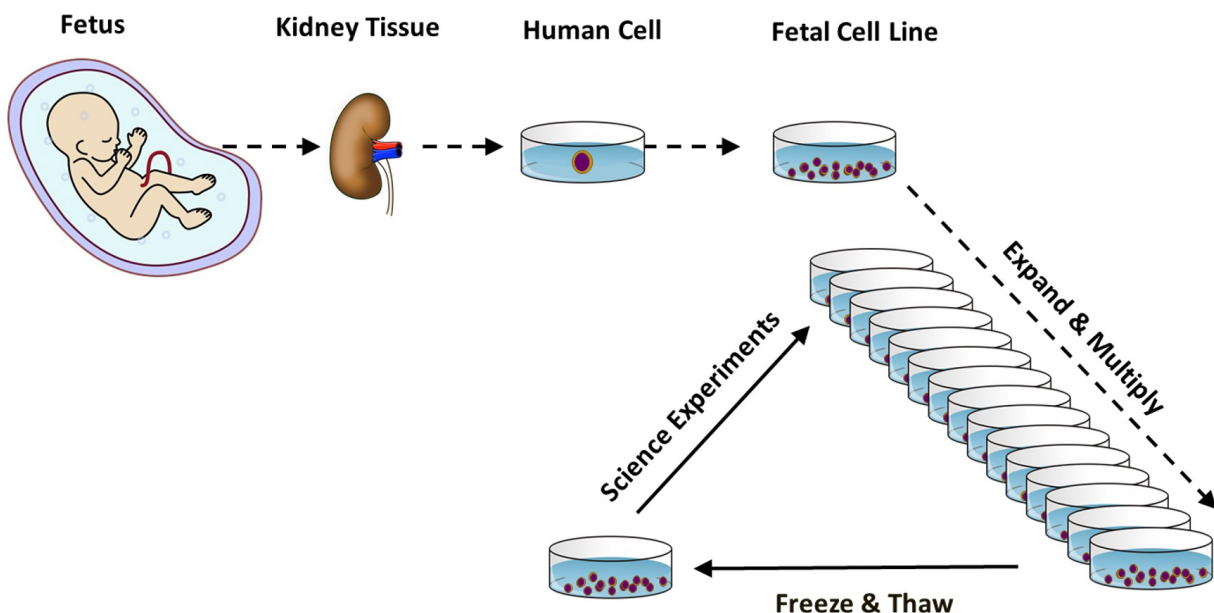


What is a fetal cell line?

A cell taken from an aborted baby is multiplied into many cells of the same kind. These can be grown indefinitely and further multiplied, creating lines of cells that are sometimes used for science experiments, even after being frozen and stored for years.

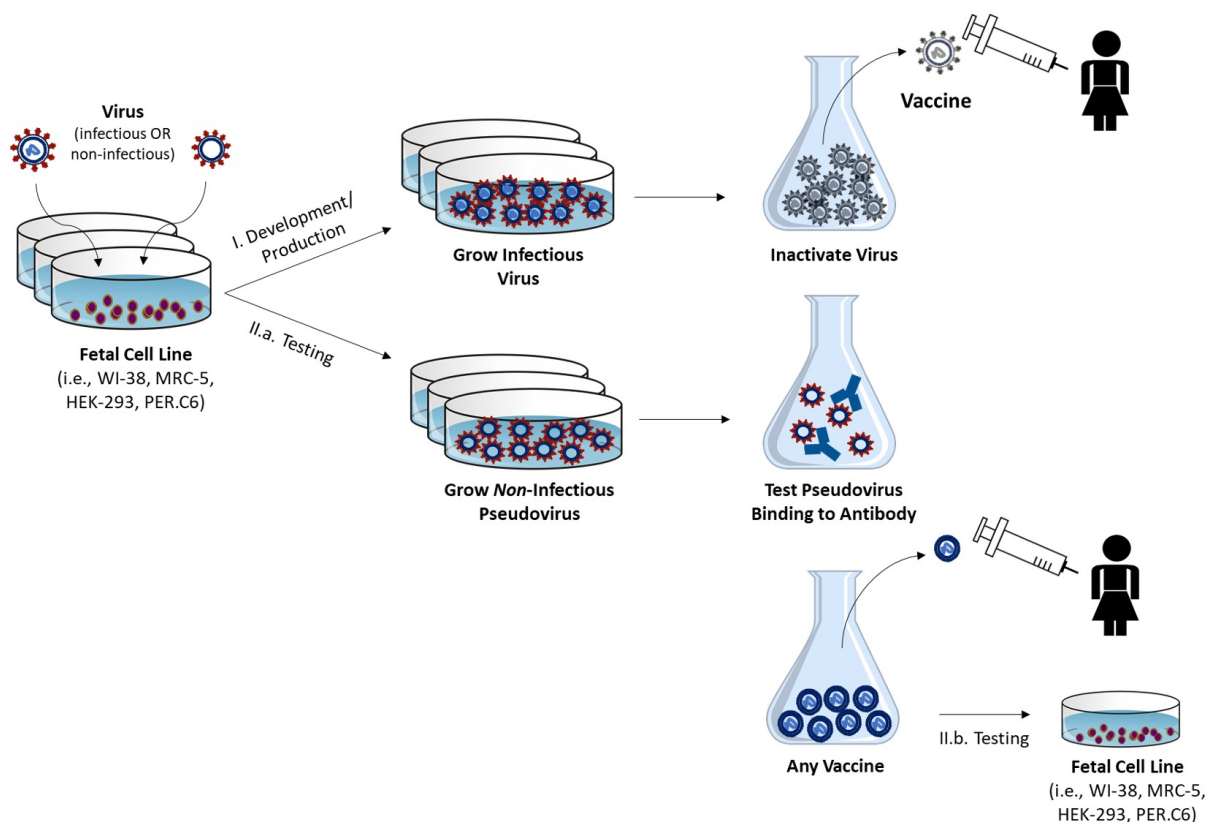


Are fetal cell lines the same as fetal tissue?

Fetal cell lines are not the same as fetal tissue. Fetal tissue requires the ongoing destruction of human life. Researchers buy body parts from tissue procurement companies to conduct lab experiments. Once the tissue is gone, researchers must go back and purchase more body parts from new abortions. Fetal cell lines *do not* rely on the ongoing destruction of “fresh” (or primary) human fetal tissue from aborted babies and will not require new abortions. Most fetal cell lines are commercially available and are not regulated by the federal government.

How are fetal cell lines used in vaccines?

Fetal cell lines have been used to grow viruses and then create inactive viruses for vaccines (I. Development and Production). Fetal cell lines have also been used to grow non-infectious pseudovirus to measure antibody binding or to perform confirmatory lab tests on vaccines (Testing II.a and II.b).



Historical fetal cell lines (WI-38 and MRC-5) derived in the 1960's and 1970's were used to create vaccines for diseases such as Rubella, Hepatitis A, and rabies. These and other historical cell lines (HEK293 and PER.C6) are sometimes used today in the development, production, and testing of vaccines.

Are fetal cell lines necessary for vaccines?

Most vaccines use non-human cells. Vaccines can be developed, produced, and tested ethically using no cells or cells from animals, insects, chicken eggs, or yeast.

Do COVID vaccines being developed in Operation Warp Speed use fetal cell lines?

Six vaccines do not use fetal cell lines in vaccine production. Two vaccines do, using the historically derived fetal cell lines HEK293 and PER.C6. Several used fetal cell lines in testing.

Table: Vaccines being developed in Operation Warp Speed

Sponsor(s)	Type of Vaccine	Development/Production	Testing
Astrazeneca & Univ. Oxford	Adenovirus carrier	✗ HEK293 abortion-derived cell line	✗
Janssen and Johnson & Johnson	Adenovirus carrier	✗ PER.C6 abortion-derived cell line	✗
Merck and IAVI	VSV (animal virus) carrier	✓ Vero monkey cells	Development discontinued
Novavax	Protein vaccine	✓ Sf9 insect cells	✗ HEK293
Sanofi and GSK	Protein vaccine	✓ Sf9 insect cells	✗ HEK293
Moderna with NIAID	mRNA vaccine	✓ <i>No cells used</i>	✗ HEK293
Pfizer and BioNTech	mRNA vaccine	✓ <i>No cells used</i>	✗ HEK293
Inovio Pharmaceuticals	DNA vaccine	✓ <i>No cells used</i>	✗ HEK293

In order to increase the rates of COVID vaccination among the public, many of whom are opposed to the use of fetal cell lines, policymakers may want to encourage the production and availability of vaccines that do not use fetal cell lines.

View more details on the updated COVID-19 vaccine chart (<https://bit.ly/cv-vaccines>) and FDA licensed vaccine chart (<https://bit.ly/cv-vaccines-fda>)

Last updated: 11/2/21