

Vaccines Licensed for Use in the United States by the Food and Drug Administration (FDA)

Cell Lines Used for Viral Vaccine Production

[Current FDA list](#) accessed 4 January 2021

<p><u>Use of Cell Lines for Vaccine Production</u> ■ No fetal cells ◆ fetal cells -- no cell lines - bacteria grow independently</p>	<p><u>Vaccine Product Name</u> (linked to FDA vaccine page including package insert)</p>	<p><u>Vaccine Trade Name</u></p>
<p>◆ WI-38</p>	<p>Adenovirus Type 4 and Type 7 Vaccine, Live, Oral</p>	<p>No Trade Name</p>
<p>--</p>	<p>Anthrax Vaccine Adsorbed</p>	<p>Biothrax</p>
<p>--</p>	<p>BCG Live</p>	<p>BCG Vaccine</p>
<p>--</p>	<p>BCG Live</p>	<p>TICE BCG</p>
<p>--</p>	<p>Cholera Vaccine Live Oral</p>	<p>Vaxchora</p>
<p>■ Vero</p>	<p>Dengue Tetravalent Vaccine, Live</p>	<p>DENGVAXIA</p>
<p>--</p>	<p>Diphtheria & Tetanus Toxoids Adsorbed</p>	<p>No Trade Name</p>
<p>--</p>	<p>Diphtheria & Tetanus Toxoids & Acellular Pertussis Vaccine Adsorbed</p>	<p>Infanrix</p>
<p>--</p>	<p>Diphtheria & Tetanus Toxoids & Acellular Pertussis Vaccine Adsorbed</p>	<p>DAPTACEL</p>
<p>■ Yeast (HepB) ■ Vero (polio) -- diphtheria, tetanus, pertussis</p>	<p>Diphtheria & Tetanus Toxoids & Acellular Pertussis Vaccine Adsorbed, Hepatitis B (recombinant) and Inactivated Poliovirus Vaccine Combined</p>	<p>Pediarix</p>
<p>■ Vero (polio) -- diphtheria, tetanus, pertussis</p>	<p>Diphtheria and Tetanus Toxoids and Acellular Pertussis Adsorbed and Inactivated Poliovirus Vaccine</p>	<p>KINRIX</p>
<p>■ Vero (polio) -- diphtheria, tetanus, pertussis</p>	<p>Diphtheria and Tetanus Toxoids and Acellular Pertussis Adsorbed and Inactivated Poliovirus Vaccine</p>	<p>Quadracel</p>
<p>■ Yeast (HepB) ■ Vero (polio) -- diphtheria, tetanus, pertussis, haemophilus</p>	<p>Diphtheria and Tetanus Toxoids and Acellular Pertussis Adsorbed, Inactivated Poliovirus, Haemophilus b Conjugate [Meningococcal Protein Conjugate] and Hepatitis B [Recombinant] Vaccine</p>	<p>VAXELIS</p>
<p>■ Vero (polio) -- diphtheria, tetanus, pertussis, haemophilus</p>	<p>Diphtheria and Tetanus Toxoids and Acellular Pertussis Adsorbed, Inactivated</p>	<p>Pentacel</p>

<u>Use of Cell Lines for Vaccine Production</u> ■ No fetal cells ◆ fetal cells -- no cell lines - bacteria grow independently	<u>Vaccine Product Name</u> <i>(linked to FDA vaccine page including package insert)</i>	<u>Vaccine Trade Name</u>
	Poliovirus and Haemophilus b Conjugate (Tetanus Toxoid Conjugate) Vaccine	
■ Vero	Ebola Zaire Vaccine, Live	ERVEBO
--	Haemophilus b Conjugate Vaccine (Meningococcal Protein Conjugate)	PedvaxHIB
--	Haemophilus b Conjugate Vaccine (Tetanus Toxoid Conjugate)	ActHIB
--	Haemophilus b Conjugate Vaccine (Tetanus Toxoid Conjugate)	Hiberix
◆ MRC-5	Hepatitis A Vaccine, Inactivated	Havrix
◆ MRC-5	Hepatitis A Vaccine, Inactivated	VAQTA
◆ MRC-5 (HepA) ■ Yeast (HepB)	Hepatitis A Inactivated and Hepatitis B (Recombinant) Vaccine	Twinrix
■ Yeast	Hepatitis B Vaccine (Recombinant)	Recombivax HB
■ Yeast	Hepatitis B Vaccine (Recombinant)	Engerix-B
■ Yeast	Hepatitis B Vaccine (Recombinant), Adjuvanted	HEPLISAV-B
■ Yeast	Human Papillomavirus Quadrivalent (Types 6, 11, 16, 18) Vaccine, Recombinant	Gardasil
■ Yeast	Human Papillomavirus 9-valent Vaccine, Recombinant	Gardasil 9
■ Insect cells	Human Papillomavirus Bivalent (Types 16, 18) Vaccine, Recombinant	Cervarix
■ Chicken eggs	Influenza A (H1N1) 2009 Monovalent Vaccine	No Trade Name
■ Chicken eggs	Influenza A (H1N1) 2009 Monovalent Vaccine	No Trade Name
■ Chicken eggs	Influenza A (H1N1) 2009 Monovalent Vaccine	No Trade Name
■ Chicken eggs	Influenza A (H1N1) 2009 Monovalent Vaccine	No Trade Name
■ Chicken eggs	Influenza A (H1N1) 2009 Monovalent Vaccine	No Trade Name

<u>Use of Cell Lines for Vaccine Production</u> ■ No fetal cells ◆ fetal cells -- no cell lines - bacteria grow independently	<u>Vaccine Product Name</u> <i>(linked to FDA vaccine page including package insert)</i>	<u>Vaccine Trade Name</u>
■ Chicken eggs	Influenza Virus Vaccine, H5N1 (for National Stockpile)	No Trade Name
■ Chicken eggs	Influenza A (H5N1) Virus Monovalent Vaccine, Adjuvanted	No Trade Name
■ MDCK cells	Influenza A (H5N1) Monovalent Vaccine, Adjuvanted	AUDENZ
■ Chicken eggs	Influenza Vaccine, Adjuvanted	FLUAD QUADRIVALENT
■ Chicken eggs	Influenza Vaccine, Adjuvanted	FLUAD
■ Chicken eggs	Influenza Vaccine	AFLURIA QUADRIVALENT
■ MDCK cells	Influenza Vaccine	Flucelvax Quadrivalent
■ Chicken eggs	Influenza Virus Vaccine (Trivalent, Types A and B)	Afluria
■ Chicken eggs	Influenza Virus Vaccine (Trivalent, Types A and B)	FluLaval
■ Chicken eggs	Influenza Vaccine, Live, Intranasal (Trivalent, Types A and B)	FluMist
■ Chicken eggs	Influenza Virus Vaccine (Trivalent, Types A and B)	Fluarix
■ Chicken eggs	Influenza Virus Vaccine (Trivalent, Types A and B)	Fluvirin
■ Chicken eggs	Influenza Virus Vaccine (Trivalent, Types A and B)	Agriflu
■ Chicken eggs	Influenza Virus Vaccine (Trivalent, Types A and B)	Fluzone, Fluzone High-Dose and Fluzone Intradermal
■ MDCK cells	Influenza Virus Vaccine (Trivalent, Types A and B)	Flucelvax
■ Insect cells	Influenza Vaccine (Trivalent)	Flublok
■ Insect cells	Influenza Vaccine (Quadrivalent)	Flublok Quadrivalent
■ Chicken eggs	Influenza Vaccine, Live, Intranasal (Quadrivalent, Types A and Types B)	FluMist Quadrivalent

<u>Use of Cell Lines for Vaccine Production</u> ■ No fetal cells ◆ fetal cells -- no cell lines - bacteria grow independently	<u>Vaccine Product Name</u> <i>(linked to FDA vaccine page including package insert)</i>	<u>Vaccine Trade Name</u>
■ Chicken eggs	Influenza Virus Vaccine (Quadrivalent, Types A and Types B)	Fluarix Quadrivalent
■ Chicken eggs	Influenza Virus Vaccine (Quadrivalent, Types A and Types B)	Fluzone Quadrivalent
■ Chicken eggs	Influenza Vaccine	Flulaval Quadrivalent
■ Vero	Japanese Encephalitis Virus Vaccine, Inactivated, Adsorbed	Ixiaro
■ Chick cells (Measles, Mumps) ◆ WI-38 (Rubella)	Measles, Mumps, and Rubella Virus Vaccine, Live	M-M-R II
■ Chick cells (Measles, Mumps) ◆ WI-38 (Rubella) ◆ MRC-5 (Varicella-Zoster)	Measles, Mumps, Rubella and Varicella Virus Vaccine Live	ProQuad
--	Meningococcal (Groups A, C, Y, and W-135) Oligosaccharide Diphtheria CRM197 Conjugate Vaccine	Menveo
--	Meningococcal (Groups A, C, Y and W-135) Polysaccharide Diphtheria Toxoid Conjugate Vaccine	Menactra
--	Meningococcal Group B Vaccine	BEXSERO
--	Meningococcal Group B Vaccine	TRUMENBA
--	Meningococcal Polysaccharide Vaccine, Groups A, C, Y and W-135 Combined	Menomune-A/C/Y/W-135
--	Meningococcal (Groups A, C, Y, W) Conjugate Vaccine	MenQuadfi
--	Plague Vaccine	No trade name
--	Pneumococcal Vaccine, Polyvalent	Pneumovax 23
--	Pneumococcal 13-valent Conjugate Vaccine (Diphtheria CRM₁₉₇ Protein)	Prevnar 13
	Poliovirus Vaccine Inactivated (Human Diploid Cell)	Poliovax <i>(discontinued in U.S.)</i>
■ Vero	Poliovirus Vaccine Inactivated (Monkey Kidney Cell)	IPOL

<u>Use of Cell Lines for Vaccine Production</u> ■ No fetal cells ◆ fetal cells -- no cell lines - bacteria grow independently	<u>Vaccine Product Name</u> <i>(linked to FDA vaccine page including package insert)</i>	<u>Vaccine Trade Name</u>
◆MRC-5	Rabies Vaccine	Imovax
■Chicken cells	Rabies Vaccine	RabAvert
■Monkey cells	Rabies Vaccine Adsorbed	No Trade Name
■Vero	Rotavirus Vaccine, Live, Oral	ROTARIX
■Vero	Rotavirus Vaccine, Live, Oral, Pentavalent	RotaTeq
■Chicken cells	Smallpox and Monkeypox Vaccine, Live, Non-Replicating	JYNNEOS
■Vero	Smallpox (Vaccinia) Vaccine, Live	ACAM2000
--	Tetanus & Diphtheria Toxoids, Adsorbed	TDVAX
--	Tetanus & Diphtheria Toxoids Adsorbed for Adult Use	TENIVAC
--	Tetanus Toxoid Adsorbed	No Trade Name
--	Tetanus Toxoid, Reduced Diphtheria Toxoid and Acellular Pertussis Vaccine, Adsorbed	Adacel
--	Tetanus Toxoid, Reduced Diphtheria Toxoid and Acellular Pertussis Vaccine, Adsorbed	Boostrix
--	Typhoid Vaccine Live Oral Ty21a	Vivotif
--	Typhoid Vi Polysaccharide Vaccine	TYPHIM Vi
◆MRC-5	Varicella Virus Vaccine Live	Varivax
■Chicken eggs	Yellow Fever Vaccine	YF-Vax
◆MRC-5	Zoster Vaccine, Live, (Oka/Merck)	Zostavax
■CHO cells	Zoster Vaccine Recombinant, Adjuvanted	SHINGRIX