

Company	Type of Vaccine	Cell Line Used in Design/Development	Cell Line Used in Production	Cell Line Used in Testing
Altimune	Replication-deficient adenovirus vector	PER.C6 Line	PER.C6 line	PER.C6 line
AstraZeneca/ University of Oxford	Replication-deficient adenovirus vector	HEK293 cells	HEK293 cells	HEK293 cells
Janssen Research/Johnson & Johnson	Replication-deficient adenovirus vector	PER.C6 Line	PER.C6 line	PER.C6 line
Vaxart	Replication-deficient adenovirus vector	HEK293 cells	HEK293 cells	HEK293 cells
Novovax	Protein vaccine Baculovirus expression plus Matric M adjuvant	Ethical	Ethical/sf9 insect cells	Pseudovirus HEK293 cells
University of Pittsburgh	Protein vaccine adenovirus-expressed recombinant proteins	HEK293 cells	HEK293 cells	HEK293 cells
Moderna	mRNA vaccine non-replicating	Sequence designed on computer	No cell line used	HEK293 cells
Pfizer and BioNTech	mRNA vaccine non-replicating	Sequence designed on computer	No cell line used	HEK293 cells
Sanofi Pasteur/ Translate Bio	mRNA vaccine non-replicating	Sequence designed on computer	No cell line used	HEK293 cells
Inovio Pharmaceuticals	DNA vaccine	Sequence designed on computer	No cell line used	HEK293 cells
Arcturas Therapeutics	mRNA vaccine self-transcribing and replicating	Sequence designed on computer	No cell line used	HEK293 cells