

Influenza A(H1N1)pdm09 candidate vaccine viruses and potency testing reagents for development and production of vaccines for use in the southern hemisphere 2015 influenza season

Antigenic and genetic analyses are performed by the WHO Collaborating Centres of the Global Influenza Surveillance and Response System (GISRS). Unless otherwise indicated all candidate vaccine viruses posted on this table have passed two-way haemagglutination inhibition (HI) test.

[National or Regional control authorities approve the composition and formulation of vaccines used in each country](#)

25 September 2014 (*last updated 29 September 2014*)

Candidate vaccine viruses

Parent virus	Candidate vaccine virus	Type of virus or reassortant	Developing institute	Available from
A/ChristChurch/16/2010 (H1N1)	Wild type virus			WHO CCs
	NIB-74	Classical	NIBSC, UK	NIBSC, UK
	NIB-74xp	Classical	NIBSC, UK	NIBSC, UK
A/Brisbane/10/2010 (H1N1)	Wild type virus			WHO CCs
	IVR-158	Classical	CSL, Australia	VIDRL, Australia
A/California/7/2009(H1 N1)	Wild type virus			WHO CCs, NIBSC, UK
	X-179A	Classical	New York Medical College, USA	CDC, USA NYMC, USA NIBSC, UK NIID, Japan
	IVR-153		CSL, Australia	VIDRL, Australia NIBSC, UK NIID, Japan
	X-181		New York Medical College, USA	CDC, USA NYMC, USA NIBSC, UK NIID, Japan
	X-181A			
	NIBRG-121	Reverse Genetics	NIBSC, UK	NIBSC, UK
	NIBRG-121xp		NIID, Japan	NIID, Japan
	NIIDRG-5			
A/California/4/2009(H1 N1)	Wild type virus			WHO CCs
	CBER-RG2	Reverse Genetics	CBER/FDA, USA	CDC, USA NIID, Japan

Parent virus	Candidate vaccine virus	Type of virus or reassortant	Developing institute	Available from
A/Texas/5/2009(H1N1)	Wild type virus			WHO CCs
	IDCDC-RG15	Reverse Genetics	CDC, USA	CDC, USA NIID, Japan
	IDCDC-RG20			CDC, USA NIID, Japan
A/England/195/2009 (H1N1)	Wild type virus			WHO CCs
	NIBRG-122	Reverse Genetics	NIBSC, UK	NIBSC, UK
A/Texas/5/2009(H1N1) and A/New York/18/2009(H1N1)	IDCDC-RG18	Reverse Genetics	CDC, USA	CDC, USA NIID, Japan
A/NewYork/18/2009(H1N1)	Wild type virus			WHO CCs NIBSC, UK
	IDCDC-RG22	Reverse Genetics	CDC, USA	CDC, USA NIID, Japan

Institutes contact details for candidate vaccine viruses orders/information:

CDC: for reverse genetics reassortants rvd6@cdc.gov

for classical reassortants xxu@cdc.gov

NIBSC: standards@nibsc.org or enquiries@nibsc.org

NIID: sitamura@nih.go.jp

NYMC: doris_bucher@nymc.edu

VIDRL: whoflu@influenzacentre.org

WHO CCs: http://www.who.int/influenza/gisrs_laboratory/collaborating_centres/list/en/

Reference antigens (freeze-dried)

Parent virus	Starting Materials		Ref Ag Lot number	Unitage (µgHA/mL)	Available from
	Candidate vaccine virus	Egg or Cell			
A/California/7/2009(H1N1)	NYMC X-179A	Egg	2009/83B	65	TGA, Australia
			13/164	35	NIBSC, UK
			69	63 ¹	CBER/FDA, USA
			2010AH1VA	80	NIID, Japan
	NYMC X-181		2009/84B	68	TGA, Australia

Parent virus	Starting Materials		Ref Ag Lot number	Unitage (µgHA/mL)	Available from
	Candidate vaccine virus	Egg or Cell			
			12/168	46	NIBSC, UK
			H1-Ag-1007	51	CBER/FDA, USA
			09/196	37	NIBSC, UK
	NIBRG-121xp				
	NYMC X-179A	Cell	09/174	50	NIBSC, UK
A/Christchurch/16/2010	NIB-74	Egg	10/258	29	NIBSC, UK
A/Brisbane/10/2010	Wild type	Cell	11/134	83	NIBSC, UK

Sheep antisera

Purified HA from		Order number	Available from
Parent virus	Egg or Cell		
A/California/7/2009 (H1N1)	Egg	14/134	NIBSC, UK
A/California/7/2009 (H1N1) NYMC X-179A	Egg	2010AH1V-1	NIID, Japan

The above-listed potency testing reagents have been developed with support from manufacturers, and calibrated by the WHO Essential Regulatory Laboratories (ERLs) of the Global Influenza Surveillance and Response System (GISRS).

ERLs contact details for reagents orders/information:

CBER/FDA: CBERShippingRequests@fda.hhs.gov
NIBSC: standards@nibsc.org or enquiries@nibsc.org
NIID: sitamura@nih.go.jp
TGA: influenza.standards@tga.gov.au

For general enquiries, please contact gisrs-whohq@who.int

For other candidate vaccine viruses and potency testing reagents, please go to <http://www.who.int/influenza/vaccines/virus/en/>