

## AVIAN INFLUENZA VACCINE PRODUCERS AND SUPPLIERS FOR POULTRY (June 2009)

*N.B. This list is to provide information on vaccine manufacturers and suppliers. The manufacturers and their vaccines are not necessarily endorsed by FAO and it is the country's responsibility that independent quality assurance/quality control for safety, purity, potency, and efficacy parameters be established.*

Laboratory	Affiliation	Strain	Subtype	Vaccine category	Web Site	Commercial name
<b>MONOVALENT INACTIVATED H5N2 VACCINES</b>						
Avimex laboratories, Mexico		A/Chicken/Mexico/232/94/CPA	H5N2 , LP	inactivated, oil adjuvant	www.avimex.com.mx	Avian Influenza H5
Boehringer Ingelheim Vetmedica S.A. de C.V., Mexico	Boehringer Ingelheim Vetmedica, GmBH, Ingelheim am Rhein, Germany	A/Chicken/Mexico/232/94/CPA	H5N2 , LP	Inactivated, oil adjuvant	www.lineavolvac.com	Volvac AI KV
Ceva Mexico	"Ceva Santé Animale SA Z.I. La Ballastiere B.P.126- 33501 Libourne, France"	A/Chicken/Mexico/232/94/CPA	H5N2 , LP	inactivated, oil adjuvant	www.ceva.com	FLU-KEM
Fort Dodge Animal Health	Fort Dodge Animal Health, Overland Park, USA	A/TY/California/20902/2002	H5N2, LP	inactivated, oil adjuvant		Avian Influenza Vaccine, H5N2 Subtype
Chengdu Jianghua Bioproducts Co.Ltd Ziyang City, Sichuan province, China	Jianghua Group	A/Turkey/England/N-28/73	H5N2, LP	Inactivated, oil adjuvant	www.jinghuagroup.net/main.asp	
Guangdong Yongshun Bio-pharm Co.Ltd, Quangdong Province, China		A/Turkey/England/N-28/73	H5N2, LP	Inactivated, oil adjuvant		
Harbin Veterinary Research Institute, Harbin, Heilongjiang province, China	National Veterinary Research Institute and National Reference laboratory for Avian Influenza, Harbin, Heilongjiang province, China	A/Turkey/England/N-28/73	H5N2, LP	Inactivated, oil adjuvant	www.hvri.ac.cn	
Lohmann Animal Health		A/Turkey/Minnesota/3689-1551/81	H5N2	Inactivated, oil adjuvant	http://www.lahinternational.com/	
Kyoto Biken Laboratories, Inc, Japan			H5N1	Inactivated, oil adjuvant	http://www.kyotobiken.jp/	KYOTO BIKEN" POULSAVER AI
Intervet, Boxmeer, The Netherlands		A/duck/Potsdam/1402/86	H5N2, LP	Inactivated, oil adjuvant	www.intervet.com	Nobilis Influenza H5N2
Intervet, Mexico	Intervet, Boxmeer, The Netherlands	A/Chicken/Mexico/232/94/CPA	H5N2, LP	Inactivated, oil adjuvant	www.intervet.com	Nobilis Influenza H5
Investigación Aplicada S.S. (IASA), Tehuacan, Puebla, Mexico		A/Chicken/Mexico/238/94/CPA	H5N2, LP	Inactivated, oil adjuvant	www.iasa.com.mx	Aerovac AI
Laprovét S.A.S, Tours, Cedex 2, France		A/Chicken/Mexico/232/94/CPA	H5N2, LP	Inactivated, oil adjuvant	www.laprovét.fr/index_eng.html	ITA-FLU
Liaonong Yikang Bioengineering Co., Ltd Liaoyang City, Liaoning Province, China		A/Turkey/England/N-28/73	H5N2, LP	Inactivated, oil adjuvant		
Nanjing Merial Animal Products Co., Ltd Nanjing City, Jiangsu province, China	Joint Venture Merial China and China Animal Husbandry Group	A/Turkey/England/N-28/73	H5N2, LP	Inactivated, oil adjuvant		
Medion, Indonesia		A/Turkey/England/N-28/73	H5N2, LP	Inactivated, oil adjuvant		Medivac AI
Qilu Animal Health Products Factory, Ji'nan City, Shandong province, China		A/Turkey/England/N-28/73	H5N2, LP	Inactivated, oil adjuvant	www.qiludb.com	
Qingdao Yebio Bioengineering Co. Ltd Qingdao City, Shandong province, China	National Animal Quarantine Institute of the Ministry of Agriculture	A/Turkey/England/N-28/73	H5N2, LP	Inactivated, oil adjuvant	www.yebio.com.cn	
Vaksindo, Indonesia		A/Turkey/England/N-28/73	H5N2, LP	Inactivated, oil adjuvant		Vaksiflu N2
Zhaoqing Dahua agriculture Bio-pharm Co.Ltd, Zhaoqing City, Guangdong, China	Veterinary College of Southern China Agriculture University	A/Turkey/England/N-28/73	H5N2, LP	Inactivated, oil adjuvant	http://www.un-pur.org/gongyingshangmulu/yiyao/zhaoqing/zhaoqing.htm	

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Zhengzhou Bio-pharm Co. Ltd Zhengzhou City, Shandong province, China	China Animal Husbandry Group	A/Turkey/England/N-28/73	H5N2, LP	Inactivated, oil adjuvant		
Influenza and ND	Intervet, Mexico		H5N2			Nobilis Influenza H5+ND
<b>MONOVALENT INACTIVATED H5N9 VACCINES</b>						
Biomune vaccines, Lenexa - Kansas, USA	Ceva Santé Animale SA	A/Turkey/Wisconsin/68	H5N9, LP	Inactivated, oil adjuvant		Layermune AIV H5N9
Merial Italia Spa	Merial	A/Turkey/Wisconsin/68	H5N9, LP	Inactivated, oil adjuvant	<a href="http://it.merial.com">http://it.merial.com</a>	Gallimune Flu H5N9
Merial Italia Spa	Merial	A/chicken/Italy/22A/98	H5N9, LP	Inactivated, oil adjuvant	<a href="http://it.merial.com">http://it.merial.com</a>	Gallimune Flu H5N9
Intervet, Boxmeer, The Netherlands	Intervet	A/duck/Potsdam/2243/84	H5N6, LP	inactivated, oil adjuvant	<a href="http://www.intervet.com">www.intervet.com</a>	Nobilis Influenza H5N6
Fort Dodge Animal Health	Fort Dodge Animal Health, Overland Park, USA	A/TY/Wisconsin/1968	H5N9, LP	inactivated, oil adjuvant		Avian Influenza Vaccine, H5N9 Subtype
Fort Dodge Animal Health	Fort Dodge Animal Health, Overland Park, USA	A/CK/Italy/22A/H5N9/1998	H5N9, LP	inactivated, oil adjuvant		POULVAC Flufend i-AI H5N9
<b>MONOVALENT INACTIVATED H5N1 VACCINES</b>						
Harbin Veterinary Research Institute, Harbin, Heilongjiang province, China		A/Goose/Guangdong/1996	H5N1, HP	Inactivated, oil adjuvant	<a href="http://www.hvri.ac.cn">www.hvri.ac.cn</a>	
Medion, Indonesia		A/Ck/Legok/2003	H5N1, HP	inactivated, oil adjuvant		Medivac
Pusvetma, Indonesia	Ministry of Agriculture, Republic Indonesia	A/Ck/Legok/2003	H5N1, HP	inactivated, aluminiumhydroxyd		Afluvet
Vaksindo, Indonesia		A/Ck/Legok/2003	H5N1, HP	inactivated, oil adjuvant		Vaksiflu AI
Veterinary Research Institute, Lahore, Pakistan	Ministry of Food, Agriculture and Livestock, Province of Punjab, Pakistan	A/Ck/Mansehra/2006	H5N1, HP	inactivated, oil adjuvant		AI-H5 Vaccine
Sindh Vaccine Production Centre, Karachi, Pakistan	Ministry of Food, Agriculture and Livestock, Province of Sindh, Pakistan	A/Ch/Mansehra/2006	H5N1, HP	inactivated oil adjuvant		AI-H5 Vaccine
Ottoman Pharmaceuticals, Lahore, Pakistan	Private company		H5N1, HP	inactivated oil adjuvant		Fluvac-H5
Biolabs (pvt) Ltd, Islamabad, Pakistan	Private company	A/Ch/Mansehra/2006	H5N1, HP	inactivated oil adjuvant		Biovac-AI
<b>MONOVALENT REVERSE GENETICS H5 VACCINES</b>						
Fort Dodge Animal Health, Overland Park, USA		rg-A/ck/VN/C58/04 with N3 gene from A/Duck/Germany/1215/73 (H2N3) and six internal genes from PR8 vaccine strain	H5N3 RG	reverse genetic, oil adjuvant	<a href="http://www.fortdodge.eu">www.fortdodge.eu</a>	Poulvac Flu Fend H5N3 RG
Harbin Veterinary Research Institute, Harbin, Heilongjiang province, China		A/Goose/Guangdong/1996 (Re-1), BHG/QH/05 (Re-3); DK/ AH/06 (Re-5) or CK/SX/06 (Re-4) and PR8 backbone	H5N1, RG	reverse genetic, oil adjuvant	<a href="http://www.hvri.ac.cn">www.hvri.ac.cn</a>	
Qingdao Yebio Bioengineering Co. Ltd Qingdao City, Shandong province, China		A/Goose/Guangdong/1996 (Re-1), BHG/QH/05 (Re-3); DK/ AH/06 (Re-5) or CK/SX/06 (Re-4) and PR8 backbone	H5N1, RG	reverse genetic, oil adjuvant		
Zhengzhou Bio-pharm Co. Ltd Zhengzhou City, Shandong province, China	China Animal Husbandry Group	reverse genetic virus from A/ Goose/Guangdong/1996 (re-1), BHG/QH/05 (Re-3); DK/AH/06 (Re-5) or CK/SX/06 (Re-4)and a PR8 vaccine strain backbone	H5N1 RG	reverse genetic, oil adjuvant		

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Nanjing Merial Animal Products Co., Ltd Nanjing City, Jiangsu province, China	Joint Venture Merial China and China Animal Husbandry Group	A/Goose/Guandong/1996 and PR8 backbone	H5N1, RG	reverse genetic, oil adjuvant		
IBP-Shigeta, Bogor, Indonesia	PT IPB Shigeta Animal Pharmaceuticals	reverse genetic virus from A/ Ck/Legok/2003	H5N1 RG	reverse genetic, oil adjuvant	www.blst.co.id	Bird Close 5.1
<b>RECOMBINANT VACCINES WITH H5 COMPONENT</b>						
Harbin Veterinary Research Institute, Harbin, Heilongjiang province, China		Avian pox virus with a cDNA insert of the H5 and N1 gene from A/Goose/Guangdong/1996	H5 derived from H5N1 HP	Live recombinant, freeze dried	www.hvri.ac.cn	
Harbin Veterinary Research Institute, Harbin, Heilongjiang province, China		Live Newcastle disease virus (LaSota) and H5 A/Barheaded goose/Qinghai/3/2005	H5N1 HP	Live recombinant NDV vectored H5, freeze dried	www.hvri.ac.cn	
Merial Select (US)	Merial	Fowlpox virus with cDNA insert of H5 gene from A/Turkey/Ireland/83	H5 derived from H5N8 LP	Live recombinant, freeze dried, subcutaneous administration	www.merial.com	Trovac AIV-H5 produced in US, Atlanta
<b>BIVALENT INACTIVATED AI VACCINES</b>						
Ceva, Mexico	Ceva Santé Animale SA (France)	A/Chicken/Mexico/232/94	H5N2 LP + La Sota NDV	inactivated, oil adjuvant		NEW-FLU-KEM
Fort Dodge Animal Health	Fort Dodge Animal Health, Overland Park, USA	A/CK/Italy/22A/H5N9/1998&A/CK/Italy/1067/H7N1/1999	H5N9/H7N1 bivalent	Oil adjuvant		POULVAC Flufend i-AI H5N9 H7N1
Merial Italia Spa	Merial	A/chicken/Italy/1067/99 (H7N1) and A/chicken/Italy/22A/98 (H5N9)	H7N9 and H5N9	inactivated, oil adjuvant	http://it.merial.com	BioFlu H7N1 and H5N9
Qingdao Yebio Bioengineering Co. Ltd Qingdao City, Shandong province, China	National Animal Quarantine Institute of the Ministry of Agriculture	No info available	H5N2 LP and H9	inactivated, oil adjuvant,	www.yebio.com.cn	
Sindh Vaccine Production Centre, Karachi, Pakistan	Ministry of Food, Agriculture and Livestock, Province of Sindh, Pakistan		H7N3 and H9N2 vaccine	Inactivated		
Avicina Laboratories, Lahore, Pakistan			H7N3 and H9N2	Inactivated		
Biolab (pvt) Ltd, Rawalpindi, Pakistan			H7N3 and H9N2	Inactivated		
Otoman Pharma , Lahore, Pakistan			H7N3 and H9N2	Inactivated		
<b>MONOVALENT INACTIVATED H7 VACCINES</b>						
Biomune vaccines, USA	Ceva Santé Animale SA	A/Chicken/New York/273874/03	H7N2	Inactivated, oil adjuvant		Layermune AIV H7N2
Biomune vaccines, USA	Ceva Santé Animale SA	A/Turkey/Utah/24721-10/95	H7N3	Inactivated, oil adjuvant		Layermune AIV H7N3
Lohmann Animal Health			H7N3	Inactivated, oil adjuvant	http://www.lahinternational.com/	
Intervet, Netherlands/Spain	Intervet	A/Chicken/Italy/473/99	H7N1	Inactivated, oil adjuvant	www.intervet.com	Nobilis Influenza H7N1
Intervet		A/duck/Potsdam/15/80	H7N7	Inactivated, oil adjuvant	www.intervet.com	Nobilis Influenza H7N7
Merial Italia Spa	Merial		H7N1		http://it.merial.com	GALLIMUNE FLU™ (for use in Italy)
Merial			H7N1 or H7N3			
Sindh Vaccine Production Centre, Karachi, Pakistan	Ministry of Food, Agriculture and Livestock, Province of Sindh, Pakistan		H7N3	Inactivated		

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Avicina Laboratories, Lahore, Pakistan			H7N3	Inactivated		
Biolab (pvt) Ltd, Rawalpindi, Pakistan			H7N3	Inactivated		
Otoman Pharma , Lahore, Pakistan			H7N3	Inactivated		
Fort Dodge Animal Health, Overland Park, USA	Fort Dodge Animal Health, Overland Park, USA	A/CK/NewYork/273874/2003	H7N2	oil adjuvant		Avian Influenza Vaccine, H7N2 Subtype
Fort Dodge Animal Health, Overland Park, USA	Fort Dodge Animal Health, Overland Park, USA	A/TY/Oregon/1971	H7N3	oil adjuvant		Avian Influenza Vaccine, H7N3 Subtype
Fort Dodge Animal Health, Overland Park, USA	Fort Dodge Animal Health, Overland Park, USA	A/CK/Italy/1067/H7N1/1999	H7N1	Oil adjuvant		POULVAC Flufend i-AI H7N1
<b>MONOVALENT INACTIVATED H9 VACCINES</b>						
Merial			H9N2	Inactivated, oil adjuvant	www.merial.com	Gallimune H9
Sindh Vaccine Production Centre, Karachi, Pakistan	Ministry of Food, Agriculture and Livestock, Province of Sindh, Pakistan		H9N2	Inactivated		
Avicina Laboratories, Lahore, Pakistan			H9N2	Inactivated		
Biolab (pvt) Ltd, Rawalpindi, Pakistan			H9N2	Inactivated		
Otoman Pharma , Lahore, Pakistan			H9N2	Inactivated		
Razi Vaccine and Serum Research Institute, Iran			H9N2	Inactivated, oil adjuvant	<a href="http://www.rvsri.com/">http://www.rvsri.com/</a>	
ABIC Biological Laboratories TEVA Ltd., Israel			H9N2	Inactivated, oil adjuvant	<a href="http://www.abic-vet.com">http://www.abic-vet.com</a>	
Biovac, Israel			H9N2	Inactivated, oil adjuvant	<a href="http://www.biovac.co.il">http://www.biovac.co.il</a>	
Shafit Biological Laboratories Ltd, Israel			H9N2	Inactivated, oil adjuvant	<a href="http://www.shafit.co.il/">http://www.shafit.co.il/</a>	
Intervet		A/CK/UAE/415/99	H9N2	Inactivated, oil adjuvant	<a href="http://www.avian-influenza.com/">http://www.avian-influenza.com/</a>	Nobilis Influenza H9N2
Jovac	Jordan Bio-Industries Center, Jordan		H9N2	Inactivated, oil adjuvant	Under construction	Jovazeit 7