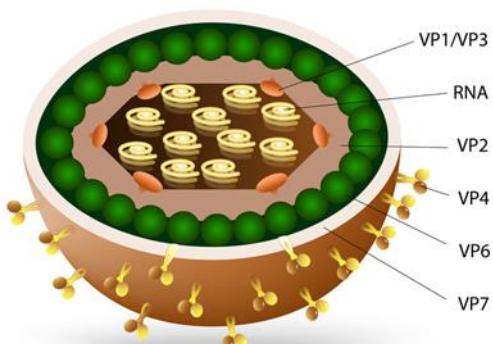
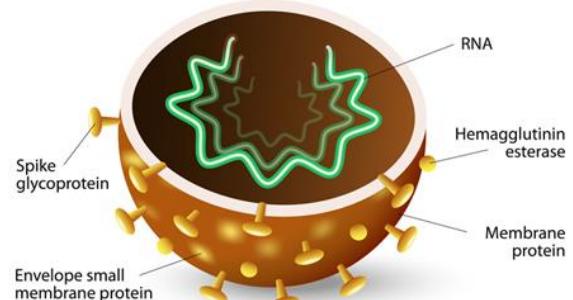


# ADI Vaccine Research ELISA List

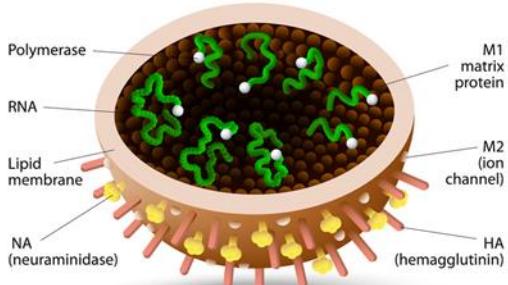
## ROTAVIRUS



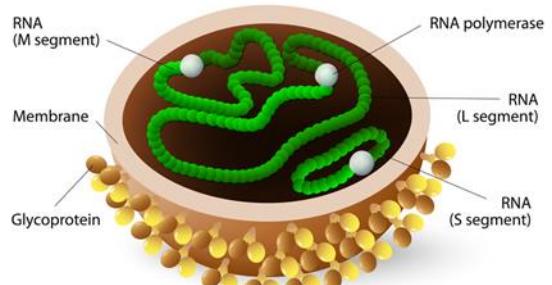
## CORONAVIRUS



## INFLUENZA VIRUS



## BUNYA VIRUS



# Explore the World of Vaccines





## ABOUT ADI

**Alpha Diagnostic International, Inc. (ADI)** is a privately held, U.S. biotechnology company headquartered in San Antonio, Texas and founded in 1993. The primary focus during the early years was the development of immunoassay reagents and kits that were not readily available to researchers. Over the years, the company expanded its focus and product development efforts to providing solutions for the unmet needs in vaccines, therapeutics, biologic drugs, infectious disease ELISA, and other novel products directed towards the consumer market which includes meat adulteration testing and rapid tests for fertility monitoring in household pets and farm animals. Our major programs are:

**Human and Animal Vaccine Design and ELISA Tests**

**Human Therapeutics (humanized antibodies) and Drug Conjugate ELISA Tests**

**Veterinary Disease and Vaccine ELISA Tests**

**Laboratory Animals Health ELISA**

### **Bioinformatics & Proteomics**

Custom gene synthesis, protein or peptide synthesis, and antibody services have been available since 1993. More than 3000 citations in peer reviewed journals.

### **Unique Technologies:**

**VacciGel™ ELISA Kits:** An innovative and industry's first test for the direct identification and measurement of vaccine components adsorbed on Alum adjuvants.

**TruStrip™ Sample Transfer System:** A novel product that allows for quantitative transfer, storage, and transport without destroying the biological activity of DNA, proteins, enzymes, and antibodies.

**ZikaSelect & DengueSelect ELISA** for the Quantification of Zika or Dengue specific antibodies in the presence of crossreactive antibodies from flaviviruses.

## ABOUT VACCINE RESEARCH CATALOG

The major focus of ADI is on the design, testing, and development of tests for various human and animal vaccines and therapeutics (humanized antibodies). From Adenovirus to Zika Virus, ADI's Vaccine Catalog offers:

- ~100 human vaccines (Bacterial, Viral, and Parasitic Vaccines)
- ~1200 Vaccine testing kits
- ~2000 Recombinant proteins, antigens, peptides, and antibodies

*From Adenovirus to Zika Virus - Explore the World of Vaccines.*

# Vaccine & Drug Development: Custom Vaccine Testing

Drug and vaccine development requires not only the availability of appropriate test kits but efficient and timely testing of animal and human samples. Over the last 25+years, ADI has researched and developed 100s of unique ELISA kits for autoimmune antibodies, serum proteins, immunoglobulin's (Ig's), specific proteins such as tumor markers. ADI has also expanded the ELISA kits to establish efficacy of various vaccines by developing vaccine-specific antigen and antibody ELISA. ADI is now offering "**Custom Testing of Samples**" for various analytes.



ADI manufactures hundreds of specialized animal, human, and monkey ELISA kits

- ELISA kits for vaccine testing
- Animal and human autoimmune ELISA kits
- Therapeutic humanized antibodies
- Animal health screening
- Host Cell Proteins (HCPs) ELISA
- Serum Proteins, Hormones, and Tumor Markers

## Advantages of working with ADI?

- ✓ 25+ years of industry experience
- ✓ ADI is the sole manufacturer of 100s of ELISA kits. Other CROs will purchase kits from ADI. It cost more and loss of time.
- ✓ Most competitive pricing and efficient documentation of data
- ✓ Confidential GLP-level testing
- ✓ Contact ADI for details and customized quote.

## About ADI's ELISA Kit Presentation and Format



ADI has been manufacturing high quality ELISA kits for >25-years in our facility in San Antonio, Texas, USA. Our kits have the following features and presentation:

- ELISA plates are pre-coated; 8x12 strip well format.
- Most kits have 12-months expiration and few kits have 6-months.
- Most kits utilize room temp incubation with no shaking for ease of use.
- All of the vaccine antibody ELISA kits are quantitative.
- ADI has full warranty for kit performance as per specifications.

## About Vaccine Research ELISA Kits Catalog

This listing is prepared to provide a quick access to appropriate catalog # available for a given vaccine or disease. This list is available in print as well as pdf file at our website <http://www.4adi.com/>

Rev 160616A



I hope that some day the practice of producing cowpox in human beings will spread over the world - when that day comes, there will be no more smallpox.

(Edward Jenner)

**Edward Jenner** (1749-1823), an English Physician, who developed the first vaccine for small pox. He is regarded as "father of immunology" and vaccine. He also coined the term 'Vaccine' in his original Publication: '1798 An Inquiry into the Causes and Effects of the Variolæ Vaccinæ'.

In 1979, the World Health Organization declared smallpox an eradicated disease.

Year	Nobel Laureate	Major Research Citation
1901	EA von Behring	Serum therapy for diphtheria
1902	R Ross	Life cycle of the malaria parasites
1905	R Koch	Tuberculosis
1907	CAL Laveran	Transmission of Malaria by Mosquito
1908	E Metchnikoff, P Ehrlich	Immune System
1912	A Carrel	Organ and blood vessel transplantation
1913	C Richet	Anaphylaxis
1919	J Bordet	Complement system
1927	J Wagner-Jauregg	Used malaria to treat syphilis
1928	C. Nicolle	Transmission of Typhus by Lice
1930	K Landsteiner	Human blood groups
1951	M Theiler	Vaccine for yellow fever
1953	SA Waksman,	Streptomycin Treatment of tuberculosis
1954	JF Enders, TH Weller and FH Robbins	Polio virus culture and polio vaccine
1958	GW Bedle, EW Tarum; J Lederberg	Gene regulation and bacterial genetics
1959	OA Kornberg	Synthesis of RNA and DNA
1960	PB Medawar, FM Burnet	Self and non-self
1962	FHC Crick, JD Watson, HF Wilkins	Structure of DNA
1965	F Jacob, A Lwoff, J Monod	Genetic control of virus synthesis
1966	CB Huggins, FP Rous	Virus and Cancer
1972	GM Edelman, RR Porter	Structure of antibodies
1975	D Baltimore, RR Porter	Reverse Transcriptase
1976	BS Blumberg, DC Gajdusek	Hepatitis antigens
1977	RS Yalow, RCI Guillemin, AV Schally,	Prion and RIA
1978	D Nathans, HO Smith, W Arber	Restriction enzyme and viral genome maps
1980	B Benacerraf, J Dausset, GD Snell; P Berg W Gilbert, F Sanger	MHC, Concept of self & Non-Self and DNA Sequencing
1983	B McClintock, K Mullis	Transposons; PCR
1984	N Jerne, GJF Köhler, C Milstein	Monoclonal antibodies
1987	S Tonegawa	Diversity of antibodies
1989	JM Bishop, HE Varmus	Retroviral oncogenes
1990	JE Murray, ED Thomas	Organ and cell transplantation
1993	M. Smith	Generation of site-specific mutants
1996	PC. Doherty, RM Zinkernagel	Immune system and MHC restriction
1997	SB Pruisner	Prions
2005	B. Marshall, R Warren	H. pylori and peptic ulcer
2008	H zur Hausen; F Barré-Sinoussi, L Montagnier,	HPV; HIV
2011	B Beutler, JA Hoffmann; RM Steinman	Innate Immunity; Dendritic cells
2012	JG Gurdon, S Yamanaka	cell differentiation and <b>pluripotent cells</b>
2015	WC Campbell, S Omura; T Tu	Therapy against roundworm; Artemisinin against Malaria

#### Pioneers (Did not win noble prize):

Edward Jenner (1797, First ever vaccine for Cowpox/smallpox vaccine)

Louis Pasteur (1886, Rabies, Anthrax, and Cholera Vaccines)

E. Engvall & S. Perlmann (1971, ELISA Technique)

Vaccines	Target Antigens	ELISA Type	Ab Type	Human	Mouse	Monkey	Rabbit	Others	
<u>Adenovirus</u>	hAd5 HXn	Ab	IgA	950-100-AHA		✓ Adenovirus Type 4 and 7 vaccines 1971			
			IgG	950-110-AHG	950-130-AMG	950-150-AMG			
			IgM	950-120-AHM	950-140-AMM	950-155-AMM			
<u>Anthrax</u>	PA83	Ab	IgG	900-165-83G	900-105-83G	900-150-83T	900-120-83G	Bo, Sw, Gt, De, Gp, Sh, Bn	
	LF	Ab	IgG	900-210-LFH	900-200-LFM	900-280-LFM	900-220-LFR	Bo, Sw, Gt, Sh, De	
	EF	Ab	IgG	900-310-EFH	900-300-EFM	900-380-EFM	900-320-EFR	Bo, Sw, Gt, De, Gp, Sh, Bn	
	LF	Ag	-	800-120-LF				✓ Anthrax Vaccine, Michigan Health Dept. 1970	
	EF	Ag	-	800-130-EF					
	PA83	Ag	-	800-100-P83				✓ Old vaccine approved again in 2015 as Biothrax	
<u>Breast Cancer</u>	Her2/Neu	Ag	-	200-530-HER					
	Her2 (ECD)	Ab	IgG	200-600-HRH	200-620-HRH				
			IgM	200-610-HRM	200-630-HRM				
			IgG	200-640-HRH	200-660-HRH				
	Her2/E75		IgM	200-650-HRM	200-670-HRM				
			IgG	200-700-HRH	200-720-HRH				
			IgM	200-710-HRM	200-730-HRM				
	Herceptin		Ag	200-510-HLG, Herceptin/Trastuzumab ELISA Kit for serum or biological buffers					
	Anti-Herceptin		Ab	200-520-HAG, Human Anti-Herceptin/Trastuzumab Antibody (HAHA) ELISA Kit					
<u>Chikungunya (CHIKV)</u>	Virus	Ab	IgG	530-400-CHG					
			IgM	530-410-CHM					
			IgG	530-420-CEG	530-440-CEG	530-460-CEG			
	E1		IgM	530-430-CEM	530-450-CEM	530-470-CEM			
			IgG	530-500-CEG	530-520-CEG	530-540-CEG			
			IgM	530-510-CEM	530-530-CEM	530-550-CEM			
<u>Cholera</u>	CTB	Ab	IgA	945-100-CTA	945-130-CTA	✓ Cholera Vaccine Approved in 1879; Pasteur created 1 <sup>st</sup> live vaccine (Chicken cholera in 1879)			
			IgG	945-110-CTG	945-140-CTG				
			IgM	945-120-CTM	945-150-CTM				
<u>Congo Fever (CCHFV)</u>	NP	Ab	IgG	AE-320420-1	AE-320400-1		AE-320440-1	AE-320450-1 (Bo)	
			IgM	AE-320430-1	AE-320410-1				
<u>Cytomegalovirus (CMV)</u>	Whole virus	Ab	IgA	3300-380-CMA		3300-780-CMA			
			IgG	3300-370-CMG		3300-770-CMG			
			IgM	3300-375-CMM		3300-775-CMM			
<u>Dengue</u>	Whole virus	Ab	IgG	540-010-DHG		✓ Sanofi's Dengvaxia Vaccine for Dengue, 2015			
			IgM	540-015-DHM					
	DV1/Env	Ab	IgG	540-100-ENG	540-110-ENG	540-120-ENG			
	DV2/Env	Ab	IgG	540-200-ENG	540-210-ENG	540-220-ENG			
	DV3/Env	Ab	IgG	540-300-ENG	540-310-ENG	540-320-ENG			
	DV4/Env	Ab	IgG	540-400-ENG	540-410-ENG	540-420-ENG			
	DV1/Prm	Ab	IgG	540-160-PRG	540-170-PRG	540-180-PRG			
	DV2/Prm	Ab	IgG	540-260-PRG	540-270-PRG	540-280-PRG			
	DV3/Prm	Ab	IgG	540-360-PRG	540-370-PRG	540-380-PRG			
	DV1/Prm	Ab	IgG	540-460-PRG	540-470-PRG	540-480-PRG			
	DV1+2+3+4 (Combo) Env	Ab	IgG	540-500-CEN	540-510-CEN	540-520-CEN			

Vaccines	Target Antigens	ELISA Type	Ab Type	Human	Mouse	Monkey	Rabbit	Others
	DV1+2+3+4 (Combo) Prm	Ab	IgG	540-560-CPR	540-570- CPR	540-580- CPR		
<u>Diphtheria</u>	Toxin/Toxoid	Ab	IgA	940-090-DHA		✓ Diphtheria Vaccine, 1921		
			IgG	940-100-DHG	940-120-DMG	940-240-DKG	940-130-DRG	940-140-DGG (Gp)
			IgM		940-125-DMM	940-245-DMM	940-135-DRM	✓ DTX licensed 1923
	CRM197 /Toxoid	Ab	IgG	940-200-DHG	940-220-DMG	940-240-DKG	940-230-DRG	
			IgM	940-210-DHM	940-225-DMM	940-245-DKM	940-235-DRM	
	DTX/Alum	Ag		940-DTX-AG1	Diphtheria Toxoid/Toxin (DTX) Vaccine ELISA for the measurement DTX in biological buffer			
				VAC-DTX-50	VacciGel Direct ELISA for the measurement of Diphtheria Toxoid in Vaccines formulated in Alum			
						1901, 1 <sup>st</sup> Nobel Prize to EV Behring for Diphtheria vaccine discovered in 1888		
<u>DNA Vaccines</u>	dsDNA	Ab	IgA	3110	5120-A			
			IgG	3100	5120	670-100-DNM		650-130-DDN (Rt)
			IgG1		5120-1	670-105-DNM		
			IgG2a		5120-2a			
			IgG2b		5120-2b			
			IgG3		5120-3			
			IgE		5120-E			
			IgM	3105	5130			
	ssDNA	Ab	IgG	3115	5320			650-330-DSN (Rt)
			IgM		5330			
<u>Dinitrophenol (DNP) model vaccine antigen</u>	DNP	Ab	IgG		640-210-DGG			640-110-DGG (Rt)
			IgM		640-220-DGM			640-120-DGM (Rt)
			IgE		640-200-DGE			640-100-DGE (Rt)
<u>Ebola</u>	Zaire-NP	Ab	IgG	AE-320620-1	AE-320600-1	AE-320650-1	AE-320640-1	
			IgM	AE-320630-1	AE-320610-1	AE-320660-1		
	Zaire-GP	Ab	IgG	AE-320620-1	AE-320600-1	AE-320650-1	AE-320640-1	
			IgM	AE-320630-1	AE-320610-1	AE-320660-1	✓ Ebola Vaccine, 2015	
	Zaire-VP40	Ab	IgG	AE-320720-1	AE-320700-1	AE-320750-1	AE-320740-1	
			IgM	AE-320730-1	AE-320710-1	AE-320760-1		
	Humanized	Ab	#AE-320810; Humanized (plant expressed) Anti-Ebola GP IgGs ELISA kit					
			#AE-320800-48; Zaire Ebola Virus Glycoprotein (EBOV GP antigen) ELISA Kit					
			#AE-320815; Anti-Humanized Ebola GP IgGs (Anti-drug antibody/ADA) ELISA kit					
	Sudan-NP	Ab	IgG	AE-321620-1	AE-321600-1	AE-321650-1	AE-321640-1	
			IgM	AE-321630-1	AE-321610-1	AE-321660-1		
	Sudan-GP	Ab	IgG	AE-321620-1	AE-321600-1	AE-321650-1	AE-321640-1	
			IgM	AE-321630-1	AE-321610-1	AE-321660-1		
	Reston-Gp	Ab	IgG	AE-321620-1		AE-321630-1		Sw, Gp
	Combo-GP	Ab	IgG	AE-325600-XH		AE-325600-XM	Zaire+Sudan+Reston+Bundibugyo	
<u>Ebola/Marburg</u>	Marburg-GP	Ab	IgG	AE-321620-1	AE-321600-1	AE-321650-1		
			IgM	AE-321630-1	AE-321610-1	AE-321660-1		
	Angola-GP	Ab	IgG	AE-322620-1	AE-322600-1	AE-322650-1		
			IgM	AE-322630-1	AE-322610-1	AE-322660-1	AE-322640-1	
	Tai Forest-GP	Ab	IgG	AE-325620-1				

Vaccines	Target Antigens	ELISA Type	Ab Type	Human	Mouse	Monkey	Rabbit	Others
<u>Epstein Barr Virus (EBV)/HH4</u>	EBNA-1	Ab	IgA	510-200-HEA				
			IgG	510-205-HEG				
			IgM	510-210-HEM				
	Early antigen (EA)	Ab	IgA	510-215-HEA				
			IgG	510-220-HEG				
			IgM	510-225-HEM				
	Virus capsid antigen (VCA)	Ab	IgA	510-230-HEA				
			IgG	510-240-HEG				
			IgM	510-245-HEM				
	Early antigen D	Ab	IgA	510-240-HEA				
			IgG	510-250-HEG				
			IgM	510-255-HEM				
<u>H. Influenzae B (Hib)</u>	PRP	Ag	-	980-HIB-AG1				Hib polyribosyl phosphate (PRP) antigen (vaccine) ELISA Kit
		Ag		980-VID-Hib-48				ID-VAC H. Influenza B (Hib-PRP) vaccine Identification ELISA Kit
		Ab	IgG	980-100-PHG	980-120-PMG	980-150-PKG	980-130-PRG	✓ Hib Vaccine 1985
			IgM	980-110-PHM	980-130-PHM		980-140-PRM	
<u>H. influenza Non-Typeable (NT-PHiD)</u>	Protein D	Ab	IgG	980-200-PDG	980-220-PDG	980-250-PDG	980-230-PDG	
			IgM	980-200-PDM				
<u>Hepatitis A virus</u>	Viral Antigens	Ab	IgG	4300-AHG	4310-AMG			1976 Nobel Prize, BS Blumberg, DC Gajdusek, Hepatitis Antigens Hep-A Vaccine in 1991
<u>Hepatitis B virus</u>	HBsAg	Ag		4105 (Qual) 4110 (Quant)				
		Ag		#VAC-HBS-50; VacciGel Direct ELISA for the measurement of HBsAg formulated in Alum				
			IgA	4200-30-IGA	4210-30-IGA			1 <sup>st</sup> Hep-B Vaccine 1981
			IgG	4200 & 4220-AHB	4210	4250	4240	4260 (gp)
			IgM	4205	4215			
<u>Herpes (HSV1/2)</u>	HSV-1	Ab	IgG	3300-380-H1G				
			IgM	3300-385-H1M				
	HSV-2	Ab	IgG	3300-390-H2G				
			IgM	3300-395-H2M				
<u>Human Papilloma Virus (HPV)</u>	HPV6L1	Ab	IgG	550-106-PHG	550-306-PMG		550-206-PRG	✓ Gardasil approved in 2006
	HPV11L1		IgG	550-111-PHG	550-311-PMG		550-211-PRG	
	HPV16L1		IgG	550-116-PHG	550-316-PMG		550-216-PRG	
	HPV18L1		IgG	550-118-PHG	550-318-PMG		550-218-PRG	✓ Cervarix approved in 2009
	HPV31L1	Ab	IgG	550-131-PHG	550-331-PMG		550-231-PRG	
	HPV33L1	Ab	IgG	550-133-PHG	550-333-PMG		550-233-PRG	
	HPV45L1	Ab	IgG	550-145-PHG	550-345-PMG		550-245-PRG	
	HPV52L1	Ab	IgG	550-152-PHG	550-352-PMG		550-252-PRG	
	HPV58L1	Ab	IgG	550-158-PHG	550-358-PMG		550-258-PRG	✓ Gardasil9 approved 2014
HPV 6+11+16+18 (Gardasil 5)		Ab	IgG	550-100-PHG	550-300-PMG		550-200-PRG	
HPV 16+18 (Cervarix)		Ab	IgG	550-400-PHG	550-420-PMG		550-410-PRG	
HPV 6+11+16+18+31+33+45+52+58 (Gardasil 9)		Ab	IgG	550-500-PHG	550-520-PMG		550-510-PRG	
Influenza A	H1N1 virus	Ab	IgA	920-040-HAG				First nasal Flu vaccine (FluMist) 2003

Vaccines	Target Antigens	ELISA Type	Ab Type	Human	Mouse	Monkey	Rabbit	Others	
<u>Influenza A (Universal Vaccine)</u>			IgG	920-060-HAA			920-070-H1G		
			IgM	920-050-HAM		Spanish Flu pandemic 1918 ~50 mln deaths			
	H5N1	Ab	IgG	920-080-H5G			920-070-H1G	920-300-H51 (ch)	
			IgG	920-080-H5G			920-070-H1G		
			IgM	920-085-H5M			✓ 1st H5N1 Vaccine in 2007		
	H1N1-NP	Ab	IgG	920-360-HNG					
			IgM	920-365-HNG					
	M2	Ab	IgA	920-200-MHA	920-220-MMA	920-380-MKA	920-240-MRA	Ch, Sw	
			IgG	920-205-MHG	920-225-MMG	920-385-MKG	920-245-MRG	920-320-MCG (CH)	
			IgM	920-210-MHM	920-230-MMM	920-390-MKM	920-250-MRM	920-325-MCM (Ch)	
<u>Influenza B</u>	Viral proteins	Ab	IgA	920-410-HBA		✓ Influenza A/B vaccine to US Army, 1945			
			IgG	920-400-HBG	920-500-MBG		920-605-RBG		
			IgM	920-405-HBM			920-610-RBM		
<u>Japanese encephalitis virus (JEV)</u>	Envelop	Ab	IgG	910-110-JEG	910-100-JEG	910-120-JEG	✓ JE-Vax Licensed 1992		
			IgM	910-115-JEM	910-105-JEM	910-125-JEM			
	prM	Ab	IgG	910-140-JEG	910-130-JEG	910-150-JEG	✓ 1st DNA Vaccine for JEV 2010		
			IgM	910-145-JEM	910-135-JEM	910-155-JEM			
	NS1	Ab	IgG	910-170-JEG	910-160-JEG	910-180-JEG			
			IgM	910-175-JEM	910-165-JEM	910-185-JEM			
<u>Keyhole limpet hemocyanin (KLH)</u>	KLH	Ab	IgG	700-140-KLG	700-150-VAG	700-170-KLG	700-110-KLR	Gt, Ch, Do, Bo	
			IgM	700-145-KLM	700-155-VAM	700-180-KLM			
<u>Malaria</u>	CSP	Ab	IgG	970-400-CHG	970-300-MMG	✓ Malaria Vaccine 2015	970-200-CSR	1902, R Ross, Nobel Prize for Malaria Study	
			IgM	970-410-CHM	970-310-MMM		970-210-CSM		
	MSP-1	Ab	IgG	970-360-HMG	970-320-MSG		970-340-RMG	1907, Laveran, Nobel Prize for Malaria Study	
			IgM	970-370-HMM	970-330-MSM		970-350-RMM		
<u>Malaria-DBL5</u>	Duffy-Binding like5 (DBL5) Domain	Ab	IgG	970-510-DBG	970-520-DBG	970-530-DBG	2015 Nobel Prize, Campbell, Omura; Tu for Therapy against roundworm; Artemisinin against Malaria		
			IgM	970-515-DBM	970-525-DBM	970-535-DBM			
<u>Measles</u>	Viral proteins	Ab	IgA	530-120-HMA	530-150-MMA		✓ Live attenuated Measles vaccine 1965		
			IgG	530-100-HMG	530-130-MMG		1st live virus measles vaccine (Rubeovax) 1963		
			IgM	530-110-HMM	530-140-MMM				
<u>Meningitis (A/C/W/Y)</u>	Polysach- A	Ab	IgG	600-800-AHG	600-805-AMG		600-810-ARG	✓ 1st Men C vaccine licensed 1974	
			IgG	600-820-AHG	600-825-AMG		600-830-ARG		
			IgG	600-840-AHG	600-845-AMG		600-850-ARG	✓ 1st Vaccine for Meningitis, Menactra 2005	
			IgG	600-860-AHG	600-865-AMG		600-870-ARG		
	A+C+W+Y combo	Ab	IgG	600-880-XHG	600-885-XMG		600-890-XRG		
			IgG1	600-881-IG1	600-886-IG1				
			IgG2	600-882-IG2	600-887-IG2				
			IgA	600-883-IGA	600-888-IGA				
			IgM	600-884-IGM	600-889-IGM		600-894-XRM		
	C+Y combo	Ab	IgG	600-895-AHG					
		Ag		600-VID-MEN-48; ID-Vac™ Meningococcal Vaccines (A/C/W/Y) Identification Kit					

Vaccines	Target Antigens	ELISA Type	Ab Type	Human	Mouse	Monkey	Rabbit	Others
<u>Meningitis B</u>	NadA	Ab	IgG	600-900-HNG	600-905-MNG		600-960-RNG	
	fHbp		IgG	600-910-HFG	600-915-MFG		600-965-RFG	✓ Trumenba approved n 2014 for Men. B
	NHBA		IgG	600-920-HHG	600-925-MHG		600-970-RHG	
	PorA		IgG	600-930-HPG	600-935-MPG		600-975-RPG	
	PorA+ NADA+fHbp +NHBA		IgG	600-950-H4G	600-955-M4G		600-980-R4G	✓ Bexsero approved in 2015 for Men. B
<u>MERS</u>	MERS-NP	Ab	IgG	RV-402100-1	Bat (RV-402120-1), RV-402110-1 (camel)			Cat, Dog
	MERS-S1		IgG	RV-402200-1	Bat (RV-40220-1); RV-402210-1 (camel)			
	MERS-S2		IgG	RV-402300-1	Bat (RV-40320-1); RV-402310-1 (camel)			
	MERS-RBD		IgG	RV-402400-1	Bat (RV-40420-1); RV-402410-1 (camel)			
<u>Mumps</u>	Viral protein	Ab	IgA	520-120-HMA	520-150-MMA			
			IgG	520-100-HMG	520-130-MMG	520-160-MMG	✓ Mumps vaccine 1967	
			IgM	520-110-HMM	520-140-MMM	520-165-MMM		
<u>Ovalbumin (egg vaccines)</u>	Ovalbumin	Ab	IgA		600-150-OGA			
			IgG	670-140-OVG	600-105-OGG		620-100-OGG	610-100-OGG (Rt)
			IgG1		600-110-OG1			
			IgG2a		600-120-O2A			
			IgG2b		600-130-O2B			
			IgG3		600-140-OG3			
			IgE	670-150-OVE	600-165-OGE			610-110-OGE (Rt)
		Ag		Chicken Egg Ovalbumin (Gal d 2) ELISA Kit in vaccine components				
<u>Pertussis</u>	Pertussis antigens (PTX, FHA, LPS etc)	Ab	IgA	960-200-PHA	960-205-PHA	✓ Pertussis vaccine inactivated licensed 1915		
			IgG	960-110-PHG	960-120-PHG	960-210-PHG		
			IgM	960-220-PHM	960-225-PHM	960-220-PHM		
	Pertussis toxin	Ab	IgG	960-190-PHG	960-130-PMG		960-150-PRG	960-170-PMG (Gp)
			IgM	960-195-PHM	960-140-PMM		960-160-PRM	960-180-PMM (Gp)
	Pertactin (PRN)	Ab	IgG	960-250-PHG	960-230-PGG	960-260-PMG	960-240-PRG	
	FHA (Filamentous hemagglutinin)	Ab	IgG	960-340-FHG	960-300-FMG		960-320-FRG	
			IgM	960-350-FHM	960-310-FMM		960-330-FRM	
	Fimbrae 2/3	Ab	IgG	960-370-FIG	960-360-FIG			
			IgM	960-375-FIM	960-365-FIM			
	FHA, PTX	Ag	960-FHA-AG1, B. Pertussis Filamentous hemagglutinin (FHA) antigen ELISA Kit					
			960-PTX-AG1, B. Pertussis Toxoid/Toxin (PTX) ELISA kit					
			VAC-PTX-50, VacciGel Direct ELISA for the measurement of Pertussis Toxoid in Alum					
<u>Polio</u>	Viral antigens (POLV1-3)	Ab	IgG	970-100-PHG	970-120-PMG	970-150-PMG	970-130-PRG	970-180-PRG (rat)
			IgM		✓ Oral polio 1/2 by Sabin 1961		970-140-PRM	✓ IPV By Salk 1952
	POLV-VP1	Ab	IgG	970-170-VPG	970-160-VPG		970-165-VPG	
			1954 Nobel Prize, Enders, Weller and Robbins, Polio virus culture and polio vaccine					
<u>Rabies</u>	Viral antigens	Ab	IgG	600-020-HRV	600-030-MRG	600-070-CRG	600-040-RRG	✓ Imovax 1980
			IgM		✓ Rabies Vaccine Licensed 1914		600-045-RRM	
	Rabies glycoprotein (RVG)	Ab	IgG	600-120-HRV	600-130-MRG	600-180-BRG	600-140-RRG	✓ Rabies vaccine by Pasteur 1884

Vaccines	Target Antigens	ELISA Type	Ab Type	Human	Mouse	Monkey	Rabbit	Others	
	Rabies nucleoprotein (NP)	Ab	IgG	600-220-HRV	600-230-MRG	600-660-BRG	600-240-RRG		
			IgM	600-225-HRM					
<u>Respiratory syncytial virus (RSV)</u>	Fusion protein (F)	Ab	IgA	510-300-HRA	510-340-MRA	510-320-MRA			
			IgG	510-305-HRG	510-345-MRG	510-325-MRG		510-370-FRG (Ft)	
			IgM	510-310-HRM	510-350-MRM	510-330-MRM			
	Virus	Ab	IgA	510-400-HRA	510-440-MRA	510-420-MRA			
			IgG	510-405-HRG	510-445-MRG	510-425-MRG			
			IgM	510-410-HRM	510-450-MRM	510-430-MRM			
<u>Rotavirus</u>	VP6	Ab	IgA	AE-300432-1	AE-300402-1				
			IgG	AE-300430-1	AE-300400-1	AE-300440-1	AE-300420-1	✓ Rotarix 2008	
			IgM	AE-300431-1	AE-300401-1				
<u>Rubella</u>	Viral proteins	Ab	IgG	510-100-HRG	510-120-MRG	Rubella Virus Attenuated 1966			
			IgM	510-110-HRM	510-130-MRM				
<u>Schistosoma</u>	Sm-p80	Ab	IgG	970-730-SMG	970-750-SMG	970-740-SMG			
			IgM	970-735-SMM	970-755-SMM	970-745-SMM			
	GST28		IgG	970-760-SMG	970-780-SMG	970-770-SMG			
			IgM	970-765-SMM	970-785-SMM	970-775-SMM			
	Whole parasite antigens	Ab	IgG	970-700-SMG	970-720-SMG	970-710-SMG			
			IgM	970-705-SMM	970-725-SMM	970-715-SMM			
<u>Streptococcus Pneumonia</u>	PCV-5/5 serotypes	Ab	IgG				560-230-C5G	✓ 1 <sup>st</sup> SPn vaccine (14 serotype) 1977	
			IgM				560-235-C5M		
	PCV-7 (7 serotypes)/ Prevnar-7	Ab	IgA	560-116-07A	560-106-07A		560-125-07A		
			IgG	560-110-07M	560-100-07G		560-120-07G		
			IgM	560-115-07M	560-105-07M		560-125-07M		
	PCV-10 (10-serotypes)/ Synflorix	Ab	IgA	560-146-10A	560-136-10A				
			IgG	560-140-10G	560-130-10G		560-150-10G		
			IgM	560-145-10M	560-135-10M		560-155-10M		
	PCV-13 (13-serotypes)/ Prevnar-13	Ab	IgA		560-166-13A		560-306-13A	✓ Prevnar 13 approved in 2010	
			IgG	560-170-13G	560-160-13G		560-300-13G		
			IgM	560-175-13M	560-165-13M		560-305-13M		
	PCV-23 (23-serotypes) Pneumovax	Ab	IgA	560-189-23A	560-181-23A		560-316-23A		
			IgG	560-190-23G	560-180-23G		560-310-23G		
			IgM	560-195-23M	560-185-23M		560-315-23M		
	6B	Ab	IgG	560-210-6BG	560-200-6BG		560-220-6BG		
			IgM				560-225-6BM		
	3	Ab	IgG		560-200-03G				
	23F	Ab	IgG		560-200-23F				
	33F	Ab	IgG		560-200-33F				
	CWPS/22F (non-specific)	Ab	IgG	560-410-C22	560-430-C22		560-420-C22		
			IgM	560-415-C22	560-435-C22		560-425-C22		
<u>Snake anti-Venom</u>	Cobra	Ab					570-100-CHG (horse)		
	Indian Krait						570-110-KHG (horse)		
	Russell's Viper						570-120-RHG (horse)		
	Saw Scaled Viper						570-130-SHG (horse)		

Vaccines	Target Antigens	ELISA Type	Ab Type	Human	Mouse	Monkey	Rabbit	Others
<u>Tetanus</u>	Venom Combo						570-140-XHG (combo)	
	Rattlesnake						570-200-DSG (sheep)	
	Pit Viper						570-210-CSG (sheep)	
	Water Moccasin						570-220-MSG (sheep)	
			Fab	7610-Fab, Sheep/Ovine Fab ELISA kit (measure total concn of antivenom Fab)				
			Fc	7615-Fc, Sheep/Ovine Antivenom Fc residue/contamination measurement ELISA				
			Fab	7710-Fab, Horse/Equine Fab ELISA kit (measure total concn of antivenom Fab)				
			Fc	7715-Fc, Horse/Equine Antivenom Fc residue/contamination measurement ELISA				
	Tetanus toxin	Ab	IgA	930-090-TTA	930-120-TMA	✓ Tetanus 1890, Adsorbed Vaccine 1937		
			IgG	930-100-TTG	930-130-TMG	930-410-TKG	930-210-TRG	930-150-TMG (Rt)
			IgM	930-105-TTM	930-140-TMM	930-415-TKM	930-220-TRM	930-155-TMM (Rt)
		Ag		930-TTX-AG1; Tetanus Toxoid/Toxin (TTX) ELISA Kit				
				VAC-TTX-50; VacciGel Direct ELISA for the measurement of Tetanus Toxoid in Alum				
<u>Tick-Borne Encephalitis Virus (TBEV/FSME)</u>	Viral proteins	Ab	IgG	910-800-THG	910-810-TMG			
			IgM	910-805-THM	910-815-TMM	✓ 1st TBE vaccine in 1937, 1957 cellular vaccine		
	NS1	AB	IgG	910-820-THG	910-830-TMG			
			IgM	910-825-THM	910-835-TMM			
<u>Tuberculosis</u>	M. tuberculosis antigens (18, 36, 40 kda)	Ab	IgA	990-100-THA		✓ BCG vaccine first used in newborn (1921). Became most widely used vaccine in the world.		
			IgG	990-110-THG		990-400-MTG		
			IgM	990-120-THM		990-410-MTM		
	BCG	Ab	IgA		990-205-TMA	1905, Nobel Prize, R Koch, Tuberculosis		
			IgG	990-330-THG	990-210-TMG		990-310-TRG	
			IgM	990-340-THM	990-220-TMM		990-320-TRM	
	ESAT-6	Ab	IgG		990-230-06G	1951, Nobel Prize, SA Waksman, use of streptomycin for tuberculosis treatment		
			IgM		990-235-06M			
	Hspx/16Kda	Ab	IgG		990-240-16G			
			IgM		990-245-16M			
	Ag85b/38kda (MVA vaccine)	Ab	IgG	990-260-38G	990-250-38G			
			IgM	990-265-38M	990-255-38M			
<u>Typhoid/S. Typhi</u>	polysaccharide (Vi)	Ab	IgG	990-500-HTG	990-520-MTG	990-560-HTG	990-540-RTG	✓ Typhim Vi Licensed 1994
			IgM	990-510-HTM	990-530-MTM		990-550-RTM	✓ Oral Ty21a Licensed 1989 ✓ Varivax Licensed 1995
<u>Varicella Zoster Virus (VZV/chicken pox)</u>	Viral antigens	Ab	IgA	520-220-HVA	520-250-MVA	520-280-BVA		
			IgG	520-200-HVG	520-230-MVG	520-260-BVG		
			IgM	520-210-HVM	520-240-MVM	520-270-BVM		✓ Zostavax approved in 2006
<u>Vesicular stomatitis Virus (VSV)</u>	Matrix (M)/Indiana	Ab	IgG	AE-327210-1	AE-327200-1	AE-327220-1		
	Glycoprotein/ Indiana	Ab	IgG	AE-327310-1	AE-327300-1	AE-327320-1		
<u>West Nile Virus (WNV)</u>	Whole viral antigens	Ab	IgG	910-300-WNG	910-200-WNG	910-400-WNG		910-570-WNG (bird)
			IgM	910-305-WNM	910-205-WNM	910-405-WNM		910-505-WNM (bird)
	prM	Ab	IgG	910-370-WNG	910-270-WNG	910-470-WNG		910-570-WNG (bird)

Vaccines	Target Antigens	ELISA Type	Ab Type	Human	Mouse	Monkey	Rabbit	Others
<u>Yellow Fever Virus (YFV)</u>	Envelop	Ab	IgM	910-375-WNM	910-275-WNM	910-475-WNM		910-575-WNM (bird)
			IgG	910-380-WNG	910-280-WNG	910-480-WNG		910-580-WNG (bird)
		IgM	910-385-WNM	910-285-WNM	910-485-WNM			910-585-WNM (bird)
	NS1	Ab	IgG	910-390-WNG	910-290-WNG	910-490-WNG		910-590-WNG (bird)
			IgM	910-395-WNM	910-295-WNM	910-495-WNM		910-595-WNM (bird)
	Envelop	Ab	IgG	530-200-EHG	530-220-EHG		✓ Live YFV (17D) licensed in 1935	
			IgM	530-205-EHM	530-225-EHM		1951, Nobel Prize, M Theiler for YFV Vaccine	
	NS1	Ab	IgG	530-300-EHG	530-320-EHG			
			IgM	530-305-EHM	530-325-EHM			
<u>Zika Virus</u>	Envelop	Ab	IgG	RV-403100-1	RV-403120-1	RV-403110-1		
			IgM	RV-403105-1	RV-403125-1	RV-403115-1		
	Env-Domain III	Ab	IgG	RV-403150-1	RV-403170-1	RV-403160-1		
			IgM	RV-403155-1	RV-403175-1	RV-403165-1		
	prM	Ab	IgG	RV-403200-1	RV-403220-1	RV-403210-1		
			IgM	RV-403205-1	RV-403225-1	RV-403215-1		
	NS1	Ab	IgG	RV-403300-1	RV-403320-1	RV-403310-1		
			IgM	RV-403305-1	RV-403325-1	RV-403315-1		
	Capsid	Ab	IgG	RV-403400-1	RV-403420-1	RV-403410-1		
			IgM	RV-403405-1	RV-403425-1	RV-403415-1		
<u>Host Cell Proteins (HCPs)</u>	E. coli	Ag		800-130-ECP; E Coli proteins (5 strains) host cell proteins (HCPs) ELISA kit				
		Ab	IgG	500-110-ECP	500-100-ECP		500-120-ECP	
		Ab	IgM	500-115-ECP				
	CHO	Ag		800-140-CHO, Chinese Hamster Ovary Cell (CHO) host cell Proteins (HCPs) ELISA kit				
		Ag		6020, Chicken IgG ELISA for vaccine components grown in chick embryo				
	Chicken (eggs ovalbumin)	Ag		6050, Chicken Egg Ovalbumin (Gal d 2) ELISA Kit in vaccine components				
		Ab	IgA		600-150-OGA			
			IgG	670-140-OVG	600-105-OGG		620-100-OGG	610-100-OGG (Rt)
			IgG1		600-110-OG1			
			IgG2a		600-120-O2A			
			IgG2b		600-130-O2B			
			IgG3		600-140-OG3			
			IgE	670-150-OVE	600-165-OGE			610-110-OGE (Rt)
			IgM	670-145-OVM	600-170-OGM			610-120-OGM (Rt)
	Bovine, BSA	Ag		8100, Bovine Albumin (BSA) ELISA Kit (for measuring residual BSA in vaccines)				
	Bovine, Lf	Ag		8090, Bovine Lactoferrin ELISA Kit for measuring residual protein in the milk of transgenic animals				
	Bovine, IgG	Ag		8010, Bovine IgG ELISA kit for measuring residual protein in vaccine grown in bovine serum or transgenic animals				
	Bovine, Tf	Ag		Bovine Transferrin ELISA kit for measuring residual protein in vaccine grown in transgenic animals				
	Bovine, Albumin	Ab	IgG	710-140-BSM	710-130-BSM		710-110-BSR	Ch, Gt, Mk
	Protein A	Ag		800-110-PRA, Protein-A ELISA Kit, 96 tests, Quantitative				
	Protein G	Ag		800-120-PRG, Protein-G ELISA Kit, 96 tests, Quantitative				
	Human Albumin	Ag		Human Serum Albumin (HSA) ELISA Kit for measuring HSA in vaccines				