ALPHA DIAGNOSTIC INTERNATIONAL

Life Technologies™ Your Molecular & Cell Technology Partner

Neisseria Meningitis Vaccine (A, C, W-135, and Y) ELISA Kits

Meningitis (Greek for membrane) is an acute inflammation of the protective membranes covering the brain and spinal cord, known collectively as the **meninges**. The meninges comprise three membranes that, together with the cerebrospinal fluid, enclose and protect the brain and spinal cord (the central nervous system). The inflammation may be caused by infection with **viruses, bacteria, or other microorganisms**, and less commonly by certain drugs. Meningitis can be life-threatening because of the inflammation's proximity to the brain and spinal cord. Meningitis can lead to serious long-term consequences such as deafness, epilepsy, hydrocephalus, or cognitive deficits, especially if not treated quickly. Outbreaks of bacterial meningitis occur between December and June each year in an area of sub-Saharan Africa known as the **meningitis belt**. In bacterial meningitis, bacteria reach the meninges by one of two main routes: through the bloodstream or through direct contact between the meninges and either the nasal cavity or the skin.

Neisseria meningitides, often referred to as meningococcus, is a **gram negative bacterium** that can cause meningitis and other forms of meningococcal disease such as meningococcemia, a life-threatening sepsis. The bacterium is referred to as a coccus because it is round, and more specifically, **diplococcus** because of its tendency to form pairs. As an exclusively human pathogen it is the main cause of bacterial meningitis in children and young adults, causing developmental impairment and death in about 10% of cases. N. meningitidis is spread through saliva and respiratory secretions during coughing, sneezing, kissing, and chewing on toys. Disease-causing strains are classified according to the antigenic structure of their polysaccharide capsule. Serotype distribution varies markedly around the world. Among the **13 identified capsular types of N. meningitidis, six (A, B, C, W135, X, and Y)** account for most disease cases worldwide. Type **A** has been the most prevalent in **Africa and Asia**, but is rare/ practically absent in North America. In the United States, **serogroup B** is the predominant cause of disease and mortality, followed by serogroup C.

Meningococcal vaccine refers to any of the vaccines used to prevent infection by Neisseria meningitidis. Different versions are effective against some or all of the following types of meningococcus: A, C, W135, and Y. The vaccines are between 85 and 100% effective for at least two years. It is on the World Health Organization's List of Essential Medicines. There are **several vaccines** available:
Quadrivalent (A, C, W, Y) or **bivalent** (C, Y, combination with Hib) and monovalent (A). **Meningococcal vaccines** are either conjugated or non-conjugated (see table below). The duration of immunity mediated by **non-conjugated vaccines** is three years or less, whereas **conjugated vaccines** provide enhanced protection, and effective herd immunity.

About ADI's Meningitis (A, C, W, Y) ELISA Kits- ADI has various serotype specific antigens (carbohydrates), made antibodies, and developed antibody ELISA kits. The ELISA kits can be used to assess immune status of humans and animals and to assess vaccine efficacy or formulated new Vaccines. Antibodies ELISA kits are available Antibody ELISA kits for other species and isotypes not listed here can be made availabel as well. Antibody ELISA kits for meningitis vaccine carier proteins (Diphtheria toxoid, Tetanus toxoid) are also available. ADI has also introduced simple, rapid and visual identification test kits for meningitis vaccines that can be performed in 15-45 mins at room temp with no technical skills or instruments (Vac-ID™ series). The Vac-ID™ kits will help prevent mislabeling, fraud, and to confirm the activity of potency of finished vaccines.

Vaccine	Manufacturer	Active Vaccine Ingredients	Conjugating proteins
Menactra (MC4)	Sanofi	Meningococcal A, C, Y, and W-135 polysaccharides	Diphtheria Toxoid (DT)
Menveo	Novartis	Meningococcal A, C, Y, and W-135 polysaccharides	DT mutant CRM197
NmVac4	JNI	Meningococcal A, C, Y, and W-135 polysaccharides	Diphtheria Toxoid (DT)
MenHibrix	GSK	Meningococcal **C and Y**/Hib-PRP polysaccharides	Tetanus Toxoid (TT)
Menomune (MPSV-4)	Sanofi	Meningococcal A, C, Y, and W-135 polysaccharides	None
Mencevax	GSK	Meningococcal A, C, Y, and W-135 polysaccharides	None
MenAfriVac	Serum instit.	Meningococcal **A**	Tetanus toxoid

India Contact:
Life Technologies (India) Pvt. Ltd.
306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444
Email: customerservice@lifetechindia.com Website: www.lifetechindia.com

Meningitis Vaccine ELISA kits

(See Details at the website) http://4adi.com/commerce/catalog/spcategory.jsp?category_id=2765

Vaccines	Target Antigens	ELISA Type	Ab Type	Human	Mouse	Rabbit
Meningitis (A/C/W/Y) Antibody ELISA kits	Polysach-A	Ab	IgG	600-800-AHG	600-805-AMG	600-810-ARG
	Polysach-C		IgG	600-820-AHG	600-825-AMG	600-830-ARG
	Polysach-W		IgG	600-840-AHG	600-845-AMG	600-850-ARG
	Polysach-Y		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		

Meningitis Carrier Proteins ELISA kits

(See Details at the website) http://4adi.com/commerce/catalog/spcategory.jsp?category_id=2765

ELISA kits for Meningitis Carrier Protein

Items Description	Kit Type	Human cat#	Mouse cat#	Rabbit cat#
Meningitis Vaccine Diphtheria Toxoid (DT/conj. protein) IgG ELISA Kits	IgG (DT)	940-100-DHG	940-120-DMG	940-130-DRG
Meningitis Vaccine Diphtheria CRM197 (conj. protein) IgG ELISA Kits	IgG (CRM197)	940-200-DHG	940-220-DMG	940-230-DRG
Meningitis Vaccine Tetanus Toxoid (TT/ conj. protein) IgG ELISA Kits	IgG (TT)	930-100-TTH	930-130-TMG	930-210-TRG

Meningitis Vaccine Antigen ELISA Kits

Items Description	**Kit Type**	**Human cat#**
Meningitis Vaccine Group A Oligosaccharides antigen ELISA kit	Antigen A	#600-80A-AG1 (96 tests, quantitative)
Meningitis Vaccine Group C Oligosaccharides antigen ELISA kit	Antigen C	#600-81C-AG1 (96 tests, quantitative)
Meningitis Vaccine Group W-135 Oligosaccharides antigen ELISA kit	Antigen W	#600-82W-AG1 (96 tests, quantitative)
Meningitis Vaccine Group Y Oligosaccharides antigen ELISA kit	Antigen Y	#600-83Y-AG1 (96 tests, quantitative)
Meningitis Vaccine Diphtheria Toxoid (DT) antigen ELISA kit	Antigen DT	#940-DTX-AG1 (96 tests, quantitative)
Meningitis Vaccine Tetanus Toxoid (TT) antigen ELISA kit	Antigen TT	#930-TTX-AG1 (96 tests, quantitative)

Meningitis Vaccine Identification (Vac-ID) Kits

Vac-ID™ Meningococcal Vaccines Identification Kit (a rapid and simple ELISA to confirm the presence of active ingredients in finished vaccines)	Vaccine ID	600-VID-Men-48 (48 test, ~30-40 min test) 600-VID-Men-96 (96 tests)

Catalog#	Product Description	Product Type
MENA11-S	Anti-Meningococcal Group A Oligosaccharides-Diphtheria CRM197 conjugate antiserum	antiserum
MENA12-S	Anti-Meningococcal Group CWY Oligosaccharides-Diphtheria CRM197 conjugate antiserum	antiserum
MENA13-S	Anti-Meningococcal Group ACWY Oligosaccharides-Diphtheria CRM197 conjugate antiserum	antiserum
MENA14-BT	Anti-Meningococcal Group ABC serotypes antigens IgG-biotin conjugate	Antibodies
MENA14-F	Anti-Meningococcal Group ABC serotypes antigens IgG-FITC conjugate	Antibodies
MENA14-HP	Anti-Meningococcal Group ABC serotypes antigens IgG-HRP conjugate	Antibodies
MENA14-UL	Anti-Meningococcal Group ABC serotypes antigens IgG, Unlabeled	Antibodies
MENA15-N-100	Meningococcal Group A Oligosaccharides-Diphtheria CRM197 conjugate control for ELISA	Antigen
MENA25-N-100	Meningococcal Group CWY Oligosaccharides-Diphtheria CRM197 conjugate control for ELISA	Antigen
MENA35-N-100	Meningococcal Group ACWY Oligosaccharides-Diphtheria CRM197 conjugate control for ELISA	Antigen

India Contact:
Life Technologies (India) Pvt. Ltd.
306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444
Email: customerservice@lifetechindia.com Website: www.lifetechindia.com