ALPHA DIAGNOSTIC INTERNATIONAL

Product Data Sheet

Cat # SPL47-R Recombinant (E. coli) Syphilis (47kDa), purified **Size**: 100 ug

Syphilis is a sexually transmitted disease caused by the spirochetal bacterium Treponema pallidum subspecies pallidum. The route of transmission of syphilis is almost always through sexual contact, although there are examples of congenital syphilis via transmission from mother to child in utero or at birth. Syphilis is a disease caused by Spirochete bacterium called Treponema pallidum (TP). If untreated, the organisms move throughout the body and can cause damage to many organs, making syphilis a life-threatening disease if not treated early enough. People who have been infected with Syphilis experience different symptoms during the 3 stages of the disease. Early, which is defined by the presence of the chancre at the site of inoculation. Syphilis may be further divided into primary, secondary, and early latent syphilis; late syphilis includes late latent and the various forms of tertiary Syphilis. The serological response to syphilis involves production of antibodies to a wide range of antigens, including non-specific antibodies and specific anti-TP antibodies. The first detectable response to infection is the production of specific antitreponemal IgM, which can be detected within 4 to 7 days after the chancre appears and until the end of the second week of infection; antitreponemal IgG appears at about four weeks later. By the time that symptoms develop, most patients have detectable IgG and IgM.

Important antigens and potential virulence factors have been identified in T. pallidum. One such antigen, with a molecular mass of 47-kilodaltons (kDa), has been shown to be surface-associated, abundant, and highly immunogenic in both human and experimental syphilis. Monoclonal antibodies to the 47-kDa antigen possess complement-dependent treponemicidal activity in both the T. pallidum immobilization test and the in vitro-in vivo neutralization test.

Formulation:

Syphilis 47 kDa AG is produced in E. coli and purified (>95%). The protein is supplied in a 50mM Tris, buffer (pH7.2) with 0.05% NaN3. in liquid or lyophilized in the same buffer (see lot specific cocn on the vial). It is recommended to reconstitute the lyophilized protein in sterile water at not less than 100µg/ml, which can then be further diluted to other aqueous solutions. Lyophilized protein although stable at room temperature for 3 weeks, should be stored desiccated below -18℃. Upon reconstitution , protein should be stored at 4℃ between 2-7 days and for future use below -18℃. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

References: Baker-Zander SA (1985) J. INf. Immun. Dis. 151, 264-272; Hanff PA (1983) Inf. Immun. 40, 825-828; . 129, 1287-1291; Neal R (1988) Inf. Immun. 56, 71-78

Related items

Catalog#	ProdDescription	Quantity/SIZE
4910	Anti-Tp (Treponema pallidium) Syphilis ELISA kit, Semi-Quantitative	1 kit
4915-R	Anti-Tp (Treponema pallidium) Syphilis rapid tests strips	100 pk
SPL15-R	Recombinant (E. coli) Syphilis antigen (15kDa), purified	100 ug
SPL17-R	Recombinant (E. coli) Syphilis (17kDa), purified	100 ug
SPL47-R	Recombinant (E. coli) Syphilis (47kDa), purified	100 ug

SPL47-R 100809A

Alpha Diagnostic Intl Inc., 6203 Woodlake Center Dr, San Antonio, TX 78244, USA; **Email**: service@4adi.com
☎ (800) 786-5777; (210) 561-9515; **Fax**: (210) 561-9544; **Web Site**: www.4adi.com