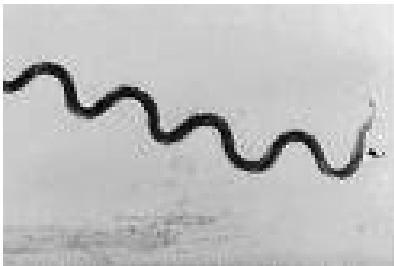


Treponema pallidum



Treponema pallidum is the causative pathogen of syphilis.

Treponema pallidum are slender bacteria, 5-20 µm long and 0.2 µm wide; they feature 10-20 primary windings and move by rotating around their lengthwise axis (see fig.).

Syphilis affects only humans. The disease is normally transmitted by direct contact, in most cases during sexual intercourse. Infection comes about because of direct contact with lesions containing the pathogens, which then invade the host through microtraumata in skin or mucosa. The incubation period is two to four weeks.

Left untreated, the disease progresses in several stages designated as primary, secondary and tertiary syphilis or stages I, II and III (see tab.).

Species	Disease	Symptoms	Mechanism of infection
Treponema pallidum	Syphilis	<p>Stage I (primary syphilis): Hard, indolent (painless) lesion, later infiltration and ulcerous disintegration, called hard chancre. Accompanied by regional lymphadenitis, also painless. Treponemes can be detected in the ulcer.</p> <p>Stage II (secondary syphilis): Generalization of the disease occurs four to eight weeks after primary syphilis. Frequent clinical symptoms include micropolylymphadenopathy and macular or papulosquamous exanthema, broad condylomas, and exanthem.</p> <p>Latent syphilis: Stage of the disease in which no clinical symptoms are manifested, but the pathogens are present in body and serum. Divided into early latency (less than four years) and late latency (more than four years).</p> <p>Stage III (tertiary syphilis): Late gummatous syphilis: manifestations in skin, mucosa and various organs. Tissue disintegration is frequent. Lesions are hardly infectious or not at all. Cardiovascular syphilis: endarteritis obliterans, syphilitic aortitis. Neurosyphilis: two major clinical categories are observed: meningovascular syphilis, i.e., endarteritis obliterans of small blood vessels of the meninges, brain, and spinal cord; parenchymatous syphilis, i.e., destruction of nerve cells in the cerebral cortex (paresisi) and spinal cord (tabes dorsalis). A great deal of overlap occurs.</p> <p>Syphilis connata: Transmission of the pathogen from mother to fetus after the fourth month of pregnancy. Leads to miscarriage or birth of severely diseased infant with numerous treponemes in its organs.</p>	<p>Transmission by direct contact, in most cases during sexual intercourse.</p> <p>Diaplacental transmission of the pathogen to the fetus</p>

Infections may be diagnosed by:

Microscopy: Determination of Treponemes feature using dark field microscopy.
 Serology: Determination of specific antibodies based on the ELISA-technique

NovaLisa™ Treponema pallidum recombinant IgG ELISA:

The NovaLisa™ Treponema pallidum recombinant IgG ELISA is intended for the qualitative determination of IgG-class antibodies against Treponema pallidum in human serum or plasma (citrate).

Antigens:

Recombinant antigens r15, r17 and r44, 5

Specific performance characteristics:

	Intraassay			Interassay			Sensitivity %	Specificity %
	n	Mean	CV %	n	Mean	CV %		
IgG	8	2,621	1,5	4	2,444	5,1	>98	>98

Order information:

ELISA	Number of determinations	Product number
Treponema pallidum recombinant IgG	96	TREG0470