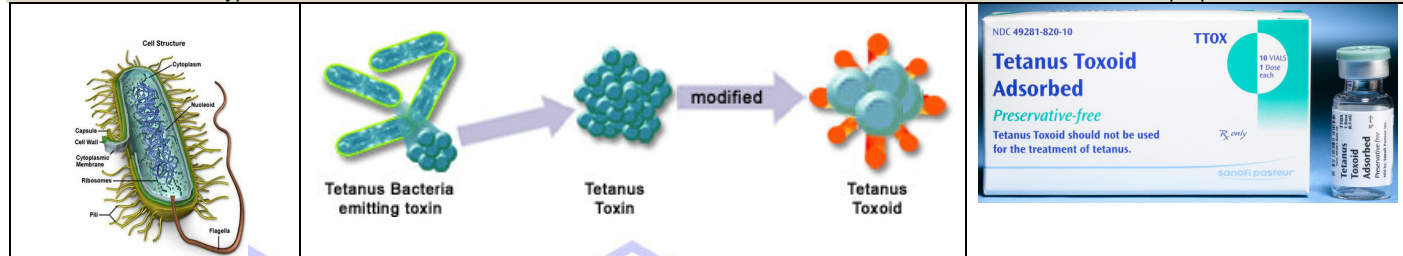


## Tetanus Vaccines Antibody ELISA Kits, Recombinant Proteins, Peptides and Antibodies

Tetanus, also called lockjaw, is a medical condition characterized by a prolonged contraction of skeletal muscle fibers. The primary symptoms are caused by tetanospasmin (also known as tetanus toxin); a neurotoxin produced by the Gram-positive, obligate anaerobic bacterium *Clostridium tetani*. Infection generally occurs through wound contamination and often involves a cut or deep puncture wound. As the infection progresses, muscle spasms develop in the jaw (thus the name "lockjaw") and elsewhere in the body. Infection can be prevented by proper immunization and by post-exposure prophylaxis. Nevertheless every year 400,000 - 800,000 persons die due to this infection. The majority of these persons live in under-developed countries. Tetanus begins when spores of *Clostridium tetani* enter damaged tissue. The spores transform into rod-shaped bacteria and produce the neurotoxin tetanospasmin. This toxin is inactive inside the bacteria, but when the bacteria die, it is released and activated by proteases. Active tetanospasmin is carried by retrograde axonal transport to the spinal cord and brain stem where it binds irreversibly to receptors at these sites. Ultimately, this produces the symptoms of the disease. Tetanus affects skeletal muscle, a type of striated muscle used in voluntary movement. The other type of striated muscle, cardiac or heart muscle cannot be tetanized because of its intrinsic electrical properties.



There are several **Tetanus vaccines** available that can be used alone or in combination with other diseases (multivalent). It is often necessary to monitor the efficacy of vaccines and determine the anti-Tetanus Ig levels in patients or for clinical trial using new formulation of vaccines. ADI's monkey anti- Tetanus Toxoid IgG ELISA kit is an immunoassay for the quantitative determination of IgG class antibodies against Tetanus Trihibit (DTAP/Hib), ActHib (Hib-PRP-T), Trihibit (DTAP/Hib), Daptacel (DTAP), Tripedia (DTAP), Td (Adult), DecavacTM (tetanus/Diphtheria), Adacel (tetanus, Diphtheria, Acellular Pertussis), DT (Pediatric) - Sanofi Pasteur; Pediarix (DTAP/HepB/IPV), Infanrix (DTAP), Boostrix (Tetanus, Diphtheria, Acellular Pertussis)- GlaxoSmithKline..

ADI has developed antibody ELISA kits to determine the efficacy of various existing vaccines and test new vaccines. ADI is further expanding the antibody ELISAs to measure IgG (and IgG1, IgG2a, IgG3, IgG4) and IgM classes. ADI has also introduced industry's first ELISA for direct testing of Tetanus Toxoid adsorbed on Alum (for vaccine identification and testing).

### Tetanus vaccine Related ELISA kits

ELISA Kit Description	Species	IgG Specific	IgM Specific	IgA Specific
<b>Tetanus Vaccine (Anti-Tetanus Toxoid) antibody ELISAs</b>	Human	960-100-TTH		
	Monkey	930-410-TKG		
	Mouse	960-130-TMG	960-140-TMM	960-120-TMA
	Rabbit	960-210-TRG	930-220-TRM	
	G. Pig	930-310-TGG	930-320-TGM	
<b>VacciGel Direct ELISA for the measurement of Tetanus Toxoid (TTX) in Vaccines formulated in Alum, 96 tests, Cat # VAC-DTX-200</b>				
<b>Tetanus Toxoid/Toxin (TTX) ELISA for the measurement DTX in biological buffer, cat # VAC-DTX-210</b>				

### Tetanus vaccine Related Antibodies, Proteins and other Reagents

Item	Catalog#	Product Description	Product Type
<b>Tetanus Toxoid (TTX)</b>	RP-343	Recombinant Anti-Tetanus Toxoid scFv IgG	Antibodies
	TTOX12-A	Rabbit Anti-C. tetani purified toxin IgG (tetanus shock toxin)	Antibodies
	TTOX13-A	Goat Anti-C. tetani purified toxin IgG (tetanus shock toxin)	Antibodies
	TTOX14-M	Monoclonal Anti-C. tetani purified toxin IgG (tetanus shock toxin)	Antibodies
	TTOX15-S	Anti-C. tetani purified toxin IgG (tetanus shock toxin)	Antibodies

Custom Testing of various vaccines and testing of animal and human samples.

Rev. 121001A