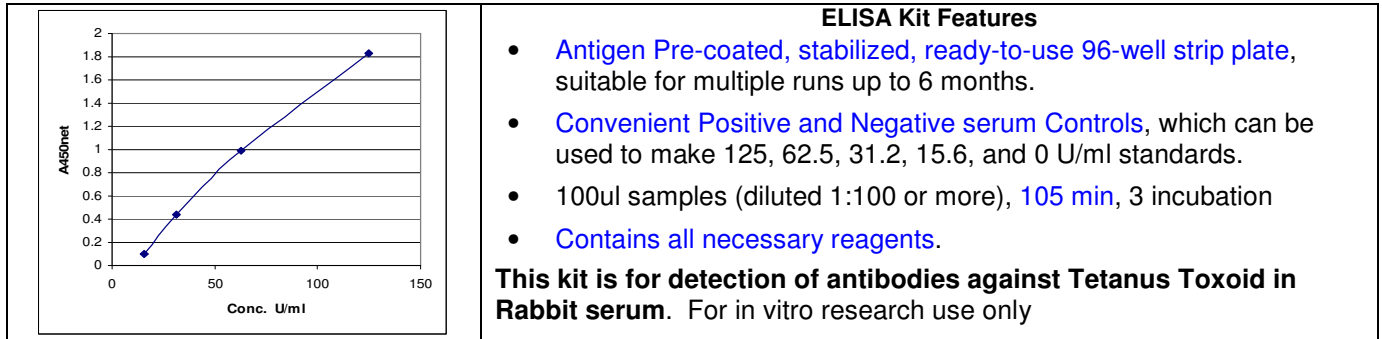


## Rabbit Anti-Tetanus Toxoid ELISA kit Cat# 930-120-TTR (96 wells)

Rabbit Anti-Tetanus Toxoid Ig's ELISA kit | Quantitative | Standards 15.6 - 125 U/ml | Sample=100 ul; 105 min assay



**Assay Procedure:** Allow all reagents to reach room temperature. Arrange and label required number of strips.

- Step 1.** Pipet **100 ul** of each of **pre-diluted standards and negative control**, and **samples containing antibodies against Tetanus Toxoid** (diluted as required) in duplicate wells. Mix gently and incubate at **60 min at room temp (25-28oC)**.
- Step 2.** **Aspirate, wash** 5 times, add **100ul of enzyme conjugate** to all wells, mix gently and incubate at **room temp for 30 min**.
- Step 3.** **Aspirate and wash** the plate five times. Add **100 ul of TMB substrate** solution to all wells, mix gently, and incubate at room temp for **15 min**.
- Step 4.** Pipet **100 ul of stop solution** into each well and mix gently (blue color turns yellow). **Measure OD at 450 nm**. Determine antibody concentration in each sample using the standards (results are expressed in units/ml).

### General Information

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 mouse Anti- Tetanus Toxoid Ig's ELISA kit is an immunoassay for the quantitative determination of Ig's (G+A+M) class antibodies against Tetanus Trihibit (DTAP/Hib), ActHib (Hib-PRP-T), Trihibit (DTAP/Hib), Daptacel (DTAP), Tripedia (DTAP), Td (Adult), Decavac<sup>TM</sup> (tetanus/Diphtheria), Adacel (tetanus, Diphtheria, Acellular Pertussis), DT (Pediatric) - Sanofi Pasteur; Pediarix (DTAP/HepB/IPV), Infanrix (DTAP), Boostrix (Tetanus, Diphtheria, Acellular Pertussis)- GlaxoSmithKline.

### Related items available from ADI

Catalog#	ProdDescription
930-100-TTH	Human Anti-Tetanus Toxoid IgG ELISA kit
930-110-TTM	Mouse Anti-Tetanus Toxoid Ig's (G+A+M) ELISA kit
930-130-TMG	Mouse Anti-Tetanus Toxoid IgG ELISA kit
930-140-TMM	Mouse Anti-Tetanus Toxoid IgM ELISA kit
930-200-TTR	Rabbit Anti-Tetanus Toxoid Ig's (G+A+M) ELISA kit
930-210-TRG	Rabbit Anti-Tetanus Toxoid IgG ELISA kit
930-220-TRM	Rabbit Anti-Tetanus Toxoid IgM ELISA kit
930-310-TGG	Guinea pig Anti-Tetanus Toxoid IgG ELISA kit
930-320-TGM	Guinea pig Anti-Tetanus Toxoid IgM ELISA kit
930-410-TGG	Monkey Anti-Tetanus Toxoid IgG ELISA kit

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