

Product Specification Sheet
Tetanus Toxoid Antibodies

Cat. TTOX11-A **Goat Anti-C. tetani purified toxin IgG (tetanus shock toxin)** **Size:** □ 100 ul

Tetanus toxin is an extremely potent neurotoxin produced by the vegetative cell of *Clostridium tetani* in anaerobic conditions, causing tetanus. It has no known function for clostridia in the soil environment where they are normally encountered. It is also called spasmogenic toxin, tetanospasmin or abbreviated to TeTx or TeNT. The tetanus toxin protein has a molecular weight of 150kDa. It is translated from the TetX gene as one protein which is subsequently cleaved into two parts: a 100kDa heavy or B-chain and a 50kDa light or A-chain. The chains are connected by a disulfide bond. The B-chain binds to disialogangliosides (GD2 and GD1b) on the neuronal membrane and contains a translocation domain which aids the movement of the protein across that membrane and into the neuron. The A-chain, a zinc endopeptidase, attacks the vesicle-associated membrane protein (VAMP).

Tetanus vaccine is a vaccine composed of inactivated tetanus toxin. This vaccine is immunogenic not pathogenic and is used to prevent an individual from contracting tetanus. Tetanus, also known as lockjaw, is a disease caused by the bacteria *Clostridium tetani* which enters the body through open wounds and releases a poison called tetanospasmin. This is a potentially deadly disease because the poison attacks the nervous system blocking nerve signals from the spinal cord to and from the muscles. However this disease is preventable through injecting multiples doses of vaccines and administering the recommended booster shot every ten years.

Toxoid refers to the inactivated version of the active toxin. It is typically produced by formaldehyde inactivation of the active protein.

Source of Antigen and Antibodies

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|---------------------|---|
| Antigen | purified tetanus toxoid |
| Ab Host/type | Goat, Polyclonal IgG, (Cat # TTOX11-A) |
| 2-Ab | Rabbit Anti-goat IgG-HRP conjugate Cat # 30220 (AP, biotin, FITC conjugates also available) |
| -ve | # 20011-1, Goat (non-immune) IgG, purified, suitable for ELISA, Western, IHC as -ve control |

Form & Storage

pure IgG

100 ul solution lyophilized powder
Buffer: PBS pH 7.4 and 0.05% azide
Reconstitute powder in 100 ul water

Stability: 6-12 months at -20oC or below.

Recommended Usage

Antibodies can be used for ELISA or Western, or IF.

General References: Farrar JJ (2000) J. Neurol. Neurosurg. Psych. 69, 292-301; Eisel U (1986) EMBO J. 5, 2495-2502; Shciavo G (1992) Nature 359, 832-835.

This product is for in vitro research use only.

Related material available from ADI

| Catalog# | ProdDescription |
|-------------|--|
| 930-100-TTH | Human Anti-Tetanus Toxin/Toxoid IgG ELISA kit, 96 |
| 930-110-TTM | Mouse Anti-Tetanus Toxin/Toxoid Ig's (G+A+M) ELISA kit, 2x96 tests, Quantitative |
| 930-120-TMA | Mouse Anti-Tetanus Toxin/Toxoid IgA ELISA kit, 2x96 |
| 930-120-TTR | cc# change to 930-200-TTR; Rabbit Anti-Tetanus Toxin/Toxoid Ig's (G+A+M) ELISA kit |
| 930-130-TMG | Mouse Anti-Tetanus Toxin/Toxoid IgG ELISA kit, 2x96 |
| 930-140-TMM | Mouse Anti-Tetanus Toxin/Toxoid IgM ELISA kit, 2x96 |
| 930-200-TTR | Rabbit Anti-Tetanus Toxin/Toxoid Ig's (G+A+M) ELISA kit, 2x96 tests, Quantitative |
| 930-210-TRG | Rabbit Anti-Tetanus Toxin/Toxoid IgG ELISA kit, 2x96 |
| 930-220-TRM | Rabbit Anti-Tetanus Toxin/Toxoid IgM ELISA kit, 2x96 tests, Quantitative |
| 930-310-TGG | G. pig Anti-Tetanus Toxin/Toxoid IgG ELISA kit, 2x96 |
| 930-320-TGM | G. pig Anti-Tetanus Toxin/Toxoid IgM ELISA kit, 2x96 tests, Quantitative |
| 930-410-TKG | Monkey Anti-Tetanus Toxin/Toxoid IgG ELISA kit, |
| TTOX12-A | Anti-C. tetani purified toxin IgG (tetanus shock toxin) |
| TTOX13-A | Anti-C. tetani purified toxin IgG (tetanus shock toxin) |
| TTOX14-M | Monoclonal Anti-C. tetani purified toxin IgG (tetanus shock toxin) |
| TTOX15-S | Anti-C. tetani purified toxin IgG (tetanus shock toxin) |
| VAC-TTX-300 | VacciGel Direct ELISA for the measurement of Tetanus Toxoid in Vaccines formulated in Alum, 96 tests |
| VAC-TTX-310 | Tetanus Toxoid/Toxin (TTX) ELISA for the measurement TTX in biological buffer |
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