ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

# Tetanus Toxoid Antibodies

**Cat.** TTOX19-A- Horse Anti-C. tetani purified toxin/Toxoid IgG (Tetanus antitoxin, neutralizing, 750 IU/ml) **Size**: □ 1 mL

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 dissialogangliosides (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 imumunogenic 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** | Horse, Polyclonal IgG, (Cat # TTOX19A-A) |
| **2-Ab** | **Goat Anti-Horse IgG-HRP conjugate** Cat # 80820 (AP, biotin, FITC conjugates also available) |
| **-ve** | # 20019-1, Horse (non-immune) IgG, purified, suitable for ELISA, Western, IHC as –ve control |

## Form & Storage

**Neat serum**

1 mL solution
Contains thimerosal as a preservative.

**Stability**: Store at 2-8°C for short term. -20°C for long term

## Recommended Usage

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

**General References:** Farrar JJ (2000) J. Neurol. Neursourg. 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

TTOX19-A 180209AC