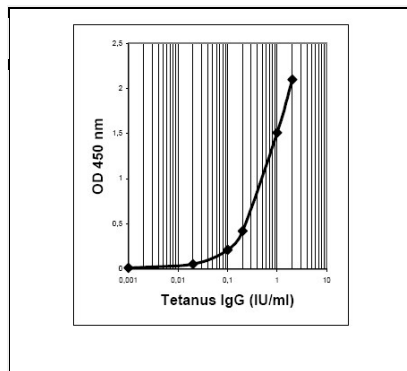


Human Anti-Tetanus IgG ELISA Kit, Cat# 930-100-TTH

Human Anti-Tetanus IgG ELISA kit | Quantitative | Standards 0-2 IU/ml | Sample=100 ul (diluted); 110 min assay



Human Anti-Tetanus IgG ELISA Kit Features

- Tetanus toxoid antigen pre-coated, stabilized, ready-to-use 96-well strip plate, suitable for multiple runs over 6-12 months.
- Convenient, stable, liquid standards: 0, 0.02; 0.1; 0.2; 1; 2 IU/mL containing human anti-Tetanus IgG in a stabilizing buffer.
- 100ul samples diluted 1:101 or more; 110 min room temp assay
- Qualitative (-ve or +ve) or quantitative methods;
- Contains all necessary reagents. Stability ~12 months

This kit is for measuring anti-B. Pertussis IgG in human serum or plasma samples. For in vitro research use only.

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

- Step 1.** Pipet **100 ul each of pre-diluted standards**, samples (diluted 1:101 or more). Mix gently and incubate at room temp for **60 min**.
- Step 2. Aspirate and wash 3X. Add 100 ul of antibody-HRP Conjugate** to all wells, mix gently and incubate at room temp for **30 min**.
- Step 3. Aspirate and wash 4X. Add 100 ul of TMB Substrate** solution to all wells, mix gently, and incubate at room temp for **20 min**.
- Step 4.** Pipet **100 ul of stop solution** into each well and mix gently (blue color turns yellow). **Measure absorbance at 450 nm**. Determine antibody concn in each sample using the calibrators (results are expressed as positive or negatives or in units/ml).

Interpretation of Results

< 0.1 IU/mL: Basic immunisation recommended
1.0 – 5.0 IU/mL to be controlled after 2–4 y

0.1 – 1.0 IU/mL: to be controlled after 1–2 y
>5.0 IU/mL: to be controlled after 4–8 y

Performance Characteristics

Intra-Assay-Precision: 5.2 % **Inter-Assay-Precision** 7.6% **Clinical Sensitivity:** 100 %
Analytical Sensitivity: 0.005 IU/mL **Cross-Reactivity:** No significant cross-reactivities known
Interferences: No interferences to bilirubin up to 0.3 mg/mL, hemoglobin up to 8.0 mg/mL und triglycerides up to 5.0 mg/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, 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 (also known as tetanus toxin). This toxin is inactive inside the bacteria, but when the bacteria dies, 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. It cleaves membrane proteins involved in neuroexocytosis, which in turn blocks neurotransmission. 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. Mortality rates reported vary from 40% to 78%. In recent years, approximately 11% of reported tetanus cases have been fatal. The highest mortality rates are in unvaccinated persons and persons over 60 years of age. Tetanus can be prevented by vaccination with tetanus toxoid. The CDC recommends that adults receive a booster vaccine every ten years, and standard care practice in many places is to give the booster to any patient with a puncture wound who is uncertain of when he or she was last vaccinated, or if he or she has had fewer than 3 lifetime doses of the vaccine. The tetanus vaccine is often administered as a combined vaccine, DPT/DTaP vaccine, which also includes vaccines against diphtheria and pertussis. For adults and children over seven, the Td vaccine (tetanus and diphtheria) or Tdap (tetanus, diphtheria, and acellular pertussis) is commonly used. Protection is given at a level of 0.1 IU/ml of anti-Tetanus Toxoid. It is advisable to determine the protection status using a qualified test before boosting.

ADI human Anti-Tetanus IgG ELISA kit is an immunoassay for the quantitative determination of IgG class antibodies against Tetanus in human serum and plasma.

Related ELISA kits

#930-100-TTH Human Anti-Tetanus Toxoid IgG ELISA kit #930-110-TTM Mouse Anti-Tetanus Toxoid IgG ELISA kit
Anti-Diphtheria Toxoid, B. Pertussis IgG, IgA, and IgM ELISA kits for human and mouse (see details at the website). rev 90830A

India Contact:

Life Technologies (India) Pvt. Ltd.

306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444
Email: customerservice@lifetechindia.com Website: www.lifetechindia.com