

PRODUCT SPECIFICATION

STATENS
SERUM
INSTITUT



POL 016 Anti Tetanus Toxin (TeNT)

Rabbit polyclonal antibody

Article No.	65873								
Product Name	POL 016 Anti Tetanus Toxin (TeNT)								
Description	<p>Preparation: Sterile filtered, 0.22 µm pore size</p> <p>Content: ~ 10 mg/mL IgG</p> <p>Solvent: Serum with 15 mM NaN₃</p> <p>Storage: 2-8 °C</p>								
Antigen	<p><i>Clostridium tetanus</i> is a gram-positive, motile bacteria found in soil and animal faeces. <i>C. tetanus</i> produces the potent exotoxin which causes tetanus (lockjaw) in humans. Tetanus toxin (TeNT) acts by inhibiting neurotransmitter release leading to chronic muscle contraction, which can eventually cause respiratory failure. It binds to peripheral neuronal synapses where it is internalized and moved by retrograde transport up through the axon into the spinal cord where it can move between postsynaptic and presynaptic neurons. It inhibits neurotransmitter release by acting as a zinc endopeptidase that catalyzes the hydrolysis of the 76-Gln-I-Phe-77 bond of synaptobrevin-2.</p> <p>Tetanus toxin is synthesized as a single 150 kDa polypeptide chain which is cleaved by a host protease to produce a heterodimeric protein, with a disulphide bond between the N-terminal 50 kDa light (L) chain and the 100 kDa C-terminal heavy (H) chain (1) responsible for the spastic paralysis. The chains are non-toxic after separation.</p>								
Immunogen	Tetanus toxoid (formaldehyde inactivated tetanus toxin).								
Specificity	POL 016 reacts with both tetanus toxin and tetanus toxoid.								
Epitope Specificity	Not determined.								
Reactivity	<p>POL 016 reacts well in ELISA with coated tetanus toxoid and in sandwich ELISA as catching antibody with monoclonal anti TeNT antibody HYB 278-21 (Art. no: 65872) as detection antibody.</p> <p>When used in western blots POL 016 detects a band at approximately 150 kDa corresponding to the heterodimeric toxin and a band at approximately 50 kDa corresponding to the light chain of TeNT.</p>								
Immunization	Rabbits were subcutaneously immunized with immunogen with Freund's complete adjuvant and Al(OH) ₃ initially and then likewise but with Freund's incomplete adjuvant in subsequent immunizations.								
Application	<table><thead><tr><th>Method</th><th>Usability</th></tr></thead><tbody><tr><td>ELISA</td><td>yes</td></tr><tr><td>Immunoblotting</td><td>yes</td></tr><tr><td>Immuno.fluoresc.</td><td>nd.</td></tr></tbody></table>	Method	Usability	ELISA	yes	Immunoblotting	yes	Immuno.fluoresc.	nd.
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References	1) Matsuda, M. and Yoneda, M (1975) Infect. Immun. 12, 1147-1153.								

Conditions

For research use only. Not for use in diagnostic procedures. Not for therapeutic use or applications.

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