

## TmpA

### Treponema Pallidum Membrane Protein A

#### *Treponema pallidum*, recombinant, *E. coli*

Cat. No.	Amount
PR-1242	100 µg

For *in vitro* use only  
Quality guaranteed for 12 months  
Store at -20°C

#### **Avoid freeze / thaw cycles**

#### **Form**

Liquid. Supplied in 10 mM Tris-HCl pH 8.0, 1 mM EDTA, 1 mM DTT and 8 M urea.

#### **Application**

Antigen in ELISA and Western blots, excellent antigen for detection of *T. pallidum* with minimal specificity problems.

#### **Specificity**

Immunoreactive with sera of *T. pallidum* infected individuals.

#### **Purity**

>90% by SDS-PAGE

#### **Description**

The protein contains the *Treponema pallidum* membrane protein A immunodominant regions.

The protein is purified by proprietary chromatographic technique.

#### **Background**

Syphilis is a chronic, complex sexually transmitted disease of humans caused by the spirochetal bacterium *Treponema pallidum*. Humans are the only known reservoir for *T. pallidum*.

One of the major immunoreactive proteins of *T. pallidum* is the lipoprotein TmpA. This protein migrates as a 44-kDa protein in SDS-PAGE gels.

*In vivo* it is produced as a 46-kDa precursor which is cleaved during maturation and addition of lipid.

#### **Selected References:**

- Brito Moreno *et al.* (2003) Monoclonal antibodies to the recombinant protein TmpA of the *Treponema pallidum*. *Hybrid. Hybridomics*. **22**:393.
- Antoni *et al.* (1996) Detection of antigenic determinants in the *Treponema pallidum* membrane protein TmpA using overlapping synthetic peptides. *J. Immunol. Methods*. **189**:137.
- Yelton *et al.* (1991) *Treponema phagedenis* encodes and expresses homologs of the *Treponema pallidum* TmpA and TmpB proteins. *Infect. Immun.* **59**:3685.
- Schouls *et al.* (1989) Overproduction and purification of *Treponema pallidum* recombinant-DNA-derived proteins TmpA and TmpB and their potential use in serodiagnosis of syphilis. *Infect. Immun.* **57**:2612.
- Ijsselmuiden *et al.* (1989) Sensitivity and specificity of an enzymelinked immunosorbent assay using the recombinant DNA-derived *Treponema pallidum* protein TmpA for serodiagnosis of syphilis and the potential use of TmpA for assessing the effect of antibiotic therapy. *J. Clin. Microbiol.* **27**:152.