TmpA
Treponema Pallidum Membrane Protein A
*Treponema pallidum*, recombinant, *E. coli*

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<tr>
<th>Cat. No.</th>
<th>Amount</th>
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<td>PR-1242</td>
<td>100 µg</td>
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For *in vitro* use only
Quality guaranteed for 12 months
Store at -20°C

**Avoid freeze / thaw cycles**

**Form**
Liquid. Supplied in 8M urea, 20mM Tris-HCl pH 8.0 and 10mM B-ME.

**Application**
Treponema Pallidum protein binds to murine anti-TmpA protein monoclonal antibodies and Treponema pallidum converted human serum polyclonal antibodies in ELISA and Western Elisa. For Dot Blots and Lateral Flow immunochromatographic diagnostic tests.

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

**Purity**
>90% by SDS-PAGE

**Description**
The protein contains beta-galactosidase (114 kDa) fused at the N-terminus.

Treponema pallidum is a gram-negative spirochaete bacterium and is considered to be metabolically crippled. There are at least four known subspecies: *T. pallidum pallidum*, *T. pallidum pertenue*, *T. pallidum carateum* and *T. pallidum endemicum*. The helical structure of *T. pallidum pallidum* allows it to move in a corkscrew motion through viscous mediums such as mucus. Treponema pallidum sub sp. pallidum has one of the smallest bacterial genomes at 1.14 million base pairs (Mb) and has limited metabolic capabilities, reflecting its adaptation through genome reduction to the rich environment of mammalian tissue.

**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:


