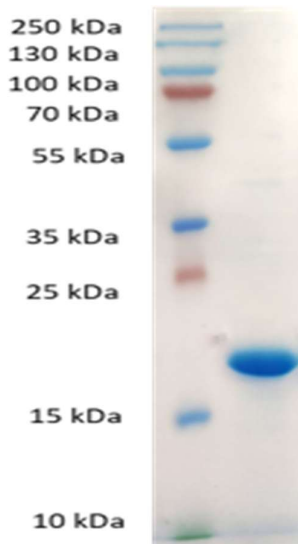


**High concentration**  
**High purity**  
**His-Tagged**

**Formulation on request**



#### Analytical :

- 1 Western Blot/Dot Blot
  - 2 ELISA
  - 3 Lateral flow assay control
- Protocol available on request

#### ORDER

##### rTP15 in solution

\* A192516-03 : 1mg/ml

**Other quantities and buffer  
available on request**

## Background

Syphilis is a sexually transmitted infection caused by the spirochete bacterium *Treponema pallidum*. The primary route of transmission is through sexual contact. Syphilis is thought to have infected 12 million additional people worldwide in 1999, with greater than 90% of cases in the developing world. Syphilis is difficult to diagnose clinically early in its presentation [1]. Confirmation is either via blood tests or direct visual inspection using microscopy. Blood tests are more commonly used, as they are easier to perform [2]. Several highly immunogenic lipoproteins have been identified as diagnostic targets throughout all stages of a syphilis infection, including Tp17, Tp15, Tp44.5 (TpmA), Tp47, Tp41 and Tp35 (TpmC). Specifically, early immune responses are against Tp47 and some of the flagellar proteins, followed by Tp15 and Tp17.

## Product

Among the periplasmic lipoproteins, Tp15 is encoded by the *tpp15* gene, with a molecular weight of 15 kDa. Previous studies showed that Tp15 was a strong membrane immunogen, reacting intensely with human syphilitic sera [3]. Tp15, along with Tp17, Tp47, and other specific *T. pallidum* antigens, are used to diagnose syphilis [4], [5] and [6].

## Technical data

This protein is recombinant Tp15 from *Treponema pallidum* expressed in *Escherichia coli*. It is purified by Immobilized metal ion affinity chromatography. The protein's theoretical size is 15KDa.

This protein is 6 His tagged.

## Application

This product can be used by RDT manufacturers

## Literature

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- 4 Q. Dang, J. Feng, X. Lu, X. Zhang, H. Xu, C. Liu, et al. Evaluation of specific antibodies for early diagnosis and management of syphilis. *Int J Dermatol*, 45 (10) (2006), pp. 1169–1171
- 5 L.R. Lin, M.L. Tong, Z.G. Fu, B. Dan, W.H. Zheng, C.G. Zhang, et al. Evaluation of a colloidal gold immunochromatography assay in the detection of *Treponema pallidum* specific IgM antibody in syphilis serofast reaction patients: a serologic marker for the relapse and infection of syphilis. *Diagn Microbiol Infect Dis*, 70 (1) (2011), pp. 10–16
- 6 V. Sambri, A. Marangoni, M.A. Simone, A. D'Antuono, M. Negosanti, R. Cevenini, et al. Evaluation of recomWell *Treponema*, a novel recombinant antigen-based enzyme-linked immunosorbent assay for the diagnosis of syphilis. *Clin Microbiol Infect*, 7 (4) (2001), pp. 200–205