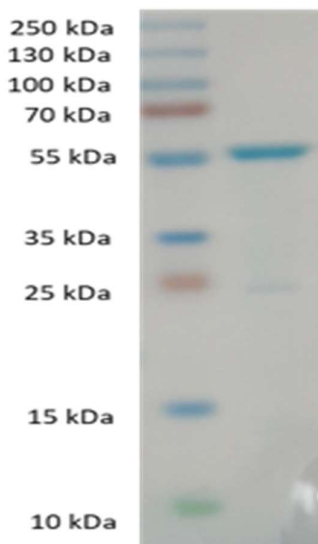


High concentration

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

rTP47 in solution

* A192516-02 : 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, Tp47 is encoded by the *tpp47* gene, with a molecular weight of 47 kDa. Previous studies identified the *T. pallidum* 47-kDa lipoprotein (Tp47) as a penicillin-binding protein (PBP) [3]. Tp47, along with Tp15, Tp17, and other specific *T. pallidum* antibodies, are used to diagnose syphilis [4], [5] and [6].

Technical data

This protein is recombinant Tp47 from *Treponema pallidum* expressed in *Escherichia coli*. It is purified by Immobilized metal ion affinity chromatography. The protein's theoretical size is 47KDa.

This protein is 6 His tagged.

Application

This product can be used by RDT manufacturers.

Literature

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- 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