

Recombinant *Treponema pallidum* p41 Protein, β -gal-tagged

Cat. No. TPp41Ag-361T **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant <i>Treponema pallidum</i> p41 Antigen Protein is produced by <i>E. coli</i> expression system. The protein containing Beta-galactosidase (114 kDa) fusion partner. Molecular weight is 153 kDa. Immunoreactive with human <i>T. pallidum</i> positive serum.
Species	<i>Treponema pallidum</i>
Source	<i>E. coli</i>
Description	The <i>T. pallidum</i> genome is 1.14 Mb and encodes a putative 1,041 proteins (Genome Sequencing Project). Different strains of <i>T. pallidum</i> (Tp) may express different repertoires of Tp proteins as demonstrated by various immunologic studies (Leader, B. et al. (2003) Infect. Immun. 71:6054-6057). In the past few years, several highly immunogenic lipoproteins have been identified as diagnostic targets throughout all stages of a syphilis infection, including Tp17, Tp15, Tp44.5 (TnpA), Tp47, Tp41, Tp35 (TnpC) and Tp0453. Specifically, early immune responses have been shown to be against Tp47 and some of the flagellar proteins, followed by Tp15 and Tp17. Tp0453 has also been shown to be a promising diagnostic marker with very high sensitivity in early detection. For this reason, several commercial tests have been developed using a combination of these immunogenic antigens and have proven to be highly sensitive and specific for the diagnosis of an active or latent syphilis infection. Also recent developments include rapid formats that can be performed at the point of care, including agglutination tests using latex particles coated with treponemal antigen or lateral flow assays.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Form	4 M Urea, 5 mM Tris-HCl, pH 8.0 containing 10 mM DTT, 0.5 mM EDTA, 50% Glycerol
Molecular Mass	153 kDa
Purity	Inclusion Bodies. Major band and minor smaller bands on 10% PAGE (Coomassie Staining).
Applications	Suitable for use in ELISA. Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded.
Storage	Upon receipt, store at -20 centigrade. Avoid multiple/freeze thaw cycles.
Concentration	9 mg/mL

 Tel: 1-631-559-9269 1-516-512-3133 Email: info@creative-biomart.com  Fax: 1-631-938-8127 45-1 Ramsey Road, Shirley, NY 11967, USA