ALPHA DIAGNOSTIC INTERNATIONAL

LIFE TECH Life Technologies™ Your Molecular & Cell Technology Partner

Product Data Sheet

☐ Cat # RP-1617 Recombinant (E. coli, his-tag) Chlamydia trachomatis Major Outer Membrane Protein (MOMP) ☐ 100 ug

Chlamydia trachomatis, an organism responsible for the most prevalent STD in the United States, is one of four bacterial species in the genus Chlamydia. C. trachomatis is a gram-negative bacterium. It is ovoid in shape and non- motile. The bacteria are non-spore forming but the elementary bodies act as a spore when released into the host. The inclusion bodies of Chlamydia trachomatis were first described in 1942; the Chlamydia trachomatis agent was first cultured in the yolk sacs of eggs by Professor Tang Fei-fan et al in 1957.

C. trachomatis includes three human biovars:

Serovars Ab, B, Ba, or C — cause trachoma: infection of the eyes, which can lead to blindness
Serovars D-K — cause urethritis, pelvic inflammatory disease, ectopic pregnancy, neonatal pneumonia, and neonatal conjunctivitis
Serovars L1, L2 and L3 — lymphogranuloma venereum (LGV).

Many, but not all, C. trachomatis strains have an extrachromosomal plasmid.

Chlamydia can exchange DNA between its different strains, thus the evolution of new strains is common. Clinical signs and symptoms of C. trachomatis infection and Gonorrhea infection are indistinguishable. C. trachomatis is the single most important infectious agent associated with blindness (trachoma); approximately 84 million worldwide suffer C. trachomatis eye infections and 8 million are blinded as a result of the infection. Trachoma is a neglected tropical disease that has been targeted by the World Health Organization for elimination by 2020.

Treatment depends on the infection site, age of the patient, and whether another infection is present. It is possible to have a C. trachomatis and one or more other sexually transmitted infections at the same time. Treatment is often done with both partners simultaneously to prevent reinfection. C. trachomatis may be treated with several antibiotic medications. These include: azithromycin, erythromycin or ofloxacin.

If treatment is necessary during pregnancy levofloxacin, ofloxacin and doxycycline are not prescribed. In the case of a patient that is pregnant the medications typically prescribed are azithromycin, amoxycillin and erythromycin. Amoxycillin has fewer side effects than the other medications for treating antenatal C. trachomatis infection. Retesting during pregnancy can be performed three weeks after treatment. If the risk of re-infection is high, screening can be repeated throughout pregnancy.

If the infection has progressed, ascending the reproductive tract and pelvic inflammatory disease develops, damage to the fallopian tubes may have already occurred. In most cases the C. trachomatis infection is then treated on an outpatient basis with ofloxacin, levofloxacin, metronidazole, ceftriaxone, probenicid, and/or doxycycline. Don't forget to treat the mother of an infant with C. trachomatis of the eye, which can evolve into a pneumonia.

The major outer membrane protein (MOMP) of Chlamydia trachomatis serovariants is known to be an immunodominant surface antigen. Moreover, it is known that the C. trachomatis MOMP elicits antibodies that recognize both linear and conformational antigenic determinants. In contrast, it has been reported that the MOMP of Chlamydia pneumoniae is not surface exposed and is immune-recessive.

Form and Storage:

MOMP (66-165 aa) is produced in E. coli as 6x his tag at C-terminal. It is supplied in 20mM Tris, pH 7.5, 50% Glycerol and 1.5 M Urea (0.5-1 mg/ml or see lot sp. conc on the vial). Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA) if it does not interfere with testing. Avoid multiple freeze-thaw cycles.

Suggested applications
WB Control, ELISA reference standard, Co-IP; Optimal concn should be tested for a given application.

References: Ernst A (2015) Cancer let. 365, 211-222; Kim SW (2015) J. Biol. Chem. 290, 17029-17040; Synoradzki K (2015) BBA 1853, 445-452; Rebbe NF (1989) JBC 264, 15006-15011; R (2014)

Related Items

Catalog#	Prod Description
2900-10	Human Anti-Chlamydia Trachomatis IgA ELISA kit, Semi-Quantitative
2900-20	Human Anti-Chlamydia Trachomatis IgG ELISA kit, Semi-Quantitative
2910-30	Human Anti-Chlamydia Trachomatis IgM ELISA kit, Semi-Quantitative
3300-500-HCA	Human Anti-Chlamydia Trachomatis IgA ELISA kit, 96 tests, semi-Quantitative
3300-510-HCG	Human Anti-Chlamydia Trachomatis IgG ELISA kit, 96 tests, semi-Quantitative
3300-520-HCM	Human Anti-Chlamydia Trachomatis IgM ELISA kit, 96 tests, semi-Quantitative
3300-530-HCA	Human Anti-Chlamydia Pneumonia IgA ELISA kit, 96 tests, semi-Quantitative
3300-540-HCG	Human Anti-Chlamydia Pneumonia IgG ELISA kit, 96 tests, semi-Quantitative
3300-550-HCM	Human Anti-Chlamydia Pneumonia IgM ELISA kit, 96 tests, semi-Quantitative
AB-13010	Mouse Anti-Chlamydia LPS IgG
CHLT11-A	Anti-Chlamydia Trachomatis IgG aff pure
CLM11-M	Mouse Anti-Chlamydia IgG (clone 1), aff pure
CLM12-M	Mouse Anti-Chlamydia IgG (clone 2), aff pure
CLM13-A	Anti-Chlamydia IgG, aff pure
CLM15-N	Chlamydia LPS, purified
MOMP11-M	Anti-Chlamydia trachomatis Major Outer Membrane Protein (MOMP) IgG
MOMP12-A	Anti-Chlamydia trachomatis Major Outer Membrane Protein (MOMP) IgG
RP-1049	Recombinant (E.Coli) Chlamydia Trachomatis W2
RP-1050	Recombinant (E.Coli) Chlamydia Trachomatis W4
RP-1051	Recombinant (E.Coli) Chlamydia Trachomatis W5
RP-1052	Recombinant (E.Coli) Chlamydia Trachomatis W4-W5
RP-1053	Recombinant (E.Coli) Chlamydia Trachomatis W5-W6
RP-1054	Recombinant (E.Coli) Chlamydia Trachomatis W3-W6
RP-1055	Recombinant (E.Coli) Chlamydia Trachomatis PGP3-D
RP-1056	Recombinant (E.Coli) Chlamydia Trachomatis HSP70 (462-503)
RP-1057	Recombinant (E.Coli) Chlamydia Trachomatis HSP70 (549-660)

RP-1617-Chlamydia-MOMP 160516SV

Alpha Diagnostic Intl Inc., 6203 Woodlake Center Dr, S an Antonio, T X 7 8 24 4 , U S A;

India Contact:
Life Technologies (India) Pvt. Ltd.
306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400 Fax: +91-11-42208444 Email: customerservice@lifetechindia.com Website: www.lifetechindia.com