

Neisseria gonorrhoeae (803): sc-66072

BACKGROUND

Neisseria gonorrhoeae is a bacteria that causes the disease gonorrhea. Spread through sexual contact, *Neisseria gonorrhoeae* usually colonizes the mucous membranes of the urethra. The resulting infection may spread from there to other tissues, such as the female endocervix. *Neisseria* species require unique nutrients to survive and proliferate. *Neisseria gonorrhoeae* is a Gram-negative bacteria that effectively establishes itself by attaching its fimbriae to nonciliated epithelial cells. Its mechanism of pathogenesis is furthered by producing both a highly toxic lipopolysaccharide endotoxin, and also IgA proteases in order to promote virulence. Common symptoms of the disease gonorrhea include purulent genital discharge and a burning sensation during urination. *Neisseria gonorrhoeae* is resistant to the penicillin family.

REFERENCES

1. Onodera, S., Kiyota, H., Endo, K., Suzuki, H., Hosobe, T., Takahashi, T., Egawa, S. and Kobayashi, I. 2006. Enhancement of antimicrobial activities of cefteram against cefixime-resistant *Neisseria gonorrhoeae* in the presence of clarithromycin or azithromycin. *J. Infect. Chemother.* 12: 207-209.
2. Furuya, R., Nakayama, H., Kanayama, A., Saika, T., Iyoda, T., Tatewaki, M., Matsuzaki, K., Kobayashi, I. and Tanaka, M. 2006. *In vitro* synergistic effects of double combinations of β -lactams and azithromycin against clinical isolates of *Neisseria gonorrhoeae*. *J. Infect. Chemother.* 12: 172-176.
3. Takahata, S., Senju, N., Osaki, Y., Yoshida, T. and Ida, T. 2006. Amino acid substitutions in mosaic penicillin-binding protein 2 associated with reduced susceptibility to cefixime in clinical isolates of *Neisseria gonorrhoeae*. *Antimicrob. Agents Chemother.* 50: 3638-3645.
4. Stohl, E.A. and Seifert, H.S. 2006. *Neisseria gonorrhoeae* DNA recombination and repair enzymes protect against oxidative damage caused by hydrogen peroxide. *J. Bacteriol.* 188: 7645-7651.
5. Wang, B., Xu, J.S., Wang, C.X., Mi, Z.H., Pu, Y.P., Hui, M., Ling, T.K. and Chan, C.Y. 2006. Antimicrobial susceptibility of *Neisseria gonorrhoeae* isolated in Jiangsu Province, China, with a focus on fluoroquinolone resistance. *J. Med. Microbiol.* 55: 1251-1255.
6. Kolader, M.E., Dukers, N.H., van der Bij, A.K., Dierdorff, M., Fennema, J.S., Coutinho, R.A. and Bruisten, S.M. 2006. Molecular epidemiology of *Neisseria gonorrhoeae* shows distinct heterosexual and homosexual networks. *J. Clin. Microbiol.* 44: 2689-2697.
7. Edwards, J.L. and Apicella, M.A. 2006. *Neisseria gonorrhoeae* PLD directly interacts with AKT kinase upon infection of primary, human, cervical epithelial cells. *Cell. Microbiol.* 8: 1253-1271.
8. Sethi, S., Sharma, D., Mehta, S.D., Singh, B., Smriti, M., Kumar, B. and Sharma, M. 2006. Emergence of ciprofloxacin resistant *Neisseria gonorrhoeae* in North India. *Indian J. Med. Res.* 123: 707-710.

SOURCE

Neisseria gonorrhoeae (803) is a mouse monoclonal antibody raised against a pool of UV-inactivated *Neisseria gonorrhoeae* cells: *Neisseria* Reference Laboratory strains G-7, R-11 and 71222 (W-I), 5766 and 8038 (W-II), 8660 (W-III).

PRODUCT

Each vial contains 100 μ g IgG_{2b} in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Neisseria gonorrhoeae (803) is recommended for detection of *Neisseria gonorrhoeae* of *Neisseria gonorrhoeae* origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with *N. meningitidis*, *N. cinerea*, *N. lactamica*, *N. sicca*, *B. catarrhalis*, *E. coli*, *P. mirabilis*, *Gardnerella vaginalis*, *Group B. Srep.* or *Chlamydia*.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.