

# Neisseria gonorrhoeae (6181): sc-57932

## BACKGROUND

*Neisseria gonorrhoeae* is a bacteria that causes the disease gonorrhoea. 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; it also produces IgA proteases in order to promote virulence. Common symptoms of the disease gonorrhoea include purulent genital discharge and a burning sensation during urination. *Neisseria gonorrhoeae* is resistant to the penicillin family.

## REFERENCES

1. 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  $\beta$ -lactams and azithromycin against clinical isolates of *Neisseria gonorrhoeae*. J. Infect. Chemother. 12: 172-176.
2. 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.
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., Dierdorp, 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 (6181) is a mouse monoclonal antibody raised against whole *Neisseria gonorrhoeae* organism.

## PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>2b</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Neisseria gonorrhoeae (6181) is recommended for detection of *Neisseria gonorrhoeae* by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500); non cross-reactive with other *Neisseria* or related organisms.

## 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](http://www.scbt.com) for detailed protocols and support products.