SANTA CRUZ BIOTECHNOLOGY, INC.

MRSA (NYR MRSA16): sc-73327



BACKGROUND

MRSA (methicillin-resistant *Staphylococcus aureus*), also known as multipleresistant *S. aureus* or oxacillin-resistant *S. aureus* (ORSA), is a variation of the common bacteria, *Staphylococcus aureus*. MRSA has the ability to withstand β -lactam antibiotic treatments such as methicillin and penicillin. MRSA is prominent in community associated environments and, in particular, it is common to hospitals. For this reason, MRSA has become a major healthcare problem in many developed countries. Patients with weakened immune systems or open wounds are at a higher risk of infection than the general public and tend to experience more severe symptoms with infection. Potential sites of infection include the respiratory tract, urinary tract, open wounds, anterior nares and intravenous catheters. Severe MRSA infections can result in necrotizing fasciitis or death.

REFERENCES

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- Blot, S.I., et al. 2002. Outcome and attributable mortality in critically III
 patients with bacteremia involving methicillin-susceptible and methicillin-resistant *Staphylococcus aureus*. Arch. Intern. Med. 162: 2229-2235.
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- Siegman-Igra, Y., et al. 2005. The role of vancomycin in the persistence or recurrence of *Staphylococcus aureus* bacteraemia. Scand. J. Infect. Dis. 37: 572-578.
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- Wyllie, D.H., et al. 2006. Mortality after *Staphylococcus aureus* bacteraemia in two hospitals in Oxfordshire, 1997-2003: cohort study. BMJ 333: 281.
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SOURCE

MRSA (NYR MRSA16) is a mouse monoclonal antibody raised against a protein of MRSA origin.

RESEARCH USE

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

PRODUCT

Each vial contains 100 $\mu g~lgG_1$ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

MRSA (NYR MRSA16) is recommended for detection of methicillin-resistant *Staphylococcus aureus* by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

SELECT PRODUCT CITATIONS

- Apostolova, M., et al. 2012. Deep vein thrombosis, ecythyma gangrenosum and heparin-induced thrombocytopenia occurring in a man with a heterozygous Factor V Leiden mutation. Hematol. Rep. 4: e20.
- Ghanbar, S., et al. 2018. A new strategy for battling bacterial resistance: turning potent, non-selective and potentially non-resistance-inducing biocides into selective ones. Nanomedicine 14: 471-481.
- Gui, Y., et al. 2023. A smart pathogen detector engineered from intracellular hydrogelation of DNA-decorated macrophages. Nat. Commun. 14: 2927.

STORAGE

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

PROTOCOLS

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