

Acinetobacter OmpA Antibody

Purified

Hybridoma Monoclonal Antibody

Product Information

Product No.: A273
Clone: ABAC-9413
Isotype: Mouse IgG
Storage: Sterile 2-8°C

Product Description

Specificity:

Anti-*Acinetobacter* (Clone ABAC-9413) is specific for OmpA of several *Acinetobacter* species including *A. baumannii* (4 strains), *A. haemolyticus*, *A. Iwoffii* (2 strains), *Moraxella catarrhalis* (2 strains). It is non-reactive with *E. coli* (mix), *Klebsiella pneumoniae*, *Proteus sp.*, *Pseudomonas aeruginosa*, *E. faecium*, *E. fecalis*, Group B strep, *Staphylococcus saprophyticus*, *N. gonorrhoeae*, *Candida sp.*

Background:

Acinetobacter is a group of Gram-negative bacteria commonly found in the environment and includes several species known to cause infections in humans. *Acinetobacter baumannii* is the most clinically significant species within this genus and is commonly associated with healthcare-associated infections (HAIs). *Acinetobacter* infections can range from mild skin and soft tissue infections to severe bloodstream infections and pneumonia, particularly in critically ill patients¹. The bacterium's ability to survive on environmental surfaces and its resistance to many commonly used antibiotics contribute to its prevalence in healthcare settings. Multidrug-resistance (MDR) is common in *Acinetobacter* especially if the bacteria become resistant to carbapenems, a first line of treatment for most infections caused by the most resistant bacteria².

Outer membrane protein A (OmpA) is found in the outer membrane of many Gram-negative bacteria and serves as an important structural component of this membrane. It is known to be involved in various functions, including bacterial adhesion to host cells, biofilm formation, and resistance to the host immune response. OmpA has been implicated in the pathogenicity of *A. baumannii*, as it helps the bacterium interact with and colonize host tissues, leading to infection. Additionally, OmpA is considered a potential target for the development of new antimicrobial therapies and vaccines against *Acinetobacter* infections due to its surface-exposed nature and immunogenic properties.³

Known Reactivity Species:

Acinetobacter sp.

Format:

Purified

Formulation

Formulated in 0.01 M phosphate buffered saline, pH 7.2 and contains 0.1% sodium azide. Due to inherent biochemical properties of antibodies, certain products may be prone to precipitation over time. Precipitation may be removed by aseptic centrifugation and/or filtration.

Purity

≥90%

Storage and Stability

This purified antibody is stable when stored at 2-8°C. Do not freeze.

Product Preparation

This monoclonal antibody is purified by protein A chromatography or sequential differential precipitations.

Applications

Applications and Recommended Usage (Quality Tested By Leinco):

ELISA: 1:20-1:200 (heat extraction required)

Country of Origin

USA

References

1. Centers for Disease Control and Prevention, National Center for Emerging and Zoonotic Infectious Diseases (NCEZID), Division of Healthcare Quality Promotion (DHQP), [Link](#)
2. Aurilio C, Sansone P, Barbarisi M, Pota V, Giaccari LG, Coppolino F, Barbarisi A, Passavanti MB, Pace MC. Mechanisms of Action of Carbapenem Resistance. Antibiotics (Basel). 2022 Mar 21;11(3):421. doi: 10.3390/antibiotics11030421. PMID: 35326884; PMCID: PMC8944602.
3. Nie, D., Hu, Y., Chen, Z. et al. Outer membrane protein A (OmpA) as a potential therapeutic target for Acinetobacter baumannii infection. J Biomed Sci 27, 26 (2020). <https://doi.org/10.1186/s12929-020-0617-7>