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Rabbit Anti Fusobacterium nucleatum ANT0084

200µl

Description

Fusobacterium nucleatum is a Gram-negative bacterium that is commonly found in the dental plaque of humans and is frequently associated with gum disease. This bacteria has been shown to play a central role in dental plaque formation and other diseases like gingivitis. This is due to its ability to adhere to a wide range of both Gram-positive and Gram-negative plaque microorganisms. *F. nucleatum* is very much associated with periodontitis, along with invasive human infections of the head and neck, chest, lung, liver and abdomen. Due to its adherence ability, it can be associated with viruses, which adhere to host tissue cells as an invasion and modulate the host's immune response [1]. The pathogenic potential of *Fusobacterium nucleatum* and its significance in the development of periodontal diseases, as well as in infections in other organs, have gained new interest for several reasons. First, this bacterium has a very high chance to be pathogenic because of its high frequency in periodontal lesions, its production of irritants that affect the tissue, its ability to co-aggregate and form mutual synergisms with other bacteria in mixed infections, and its ability to form numerous aggregates with other suspected pathogens in periodontal disease. Second, *F. nucleatum* is very common in clinical infections of other body sites [2]. In the last few years it is intensively investigate the role of *Fusobacterium nucleatum* in atherosclerosis development and in promoting or inflicting different cancers [3;4].

Product type

Primary Polyclonal antibody

Immunogen

F. nucleatum ATCC 25586 10^{10} cells inactivated in glutaraldehyde 2.5%v/v

Source

Rabbit

Reacts with

Fusobacterium nucleatum

Specificity

Fusobacterium nucleatum; The antibody anti F. nucleatum showed cross-reactivity toward S. oralis ATCC9811 at 1:50v/v dilution but not cross-react with S. mutans ATCC 25175 and P. gingivalis ATCC 33277 ***[5]***.

Tested applications

ELISA; FACS; Confocal laser scanning microscopy;

Recommended dilutions

Recommended starting dilutions can vary lot-to-lot. Consult the product information label in the package for lot specific values.

Note: When using any primary antibody or fluorescence-labelled secondary antibody for the first time, titrate out the antibody to determine which dilution allows the strongest specific signal with the lowest background for your sample **[5]**.

Purity

Polyclonal immunoglobulins purified by protein A affinity chromatography.

Form

Liquid. Supplied in 100mM sodium citrate, 50mM Tris and 0.05% v/v glycerol. Neutral pH.

Storage

Shipped at +4°C. When stored at +4°C, the antibody is stable for 18 months. For extended storage, the solution may be frozen at –20°C in working aliquots.
Note: Avoid repeated freezing and thawing cycles.

Reference:

[1] HGSC at Baylor College of Medicine

[2] Bolstad, A.I., Jensen, H.B., Bakken, V. "Taxonomy, Biology, and Periodontal Aspects of Fusobacterium nucleatum." Clinical of Microbiology Reviews. Jan. 1996. pp. 55-71

[3] S. S. Chukkapalli, I. M. Velsko , M.F. Rivera-Kweh, D.Zheng, A.R.Lucas and L.Kesavalu. "Polymicrobial Oral Infection with four Periodontal Bacteria Orchestrates a Distinct Inflammatory Response and Atherosclerosis in ApoE^{null} Mice" PlosOne November 30,2015 DOI:10.1371/journal.pone.014329

[4] P.Gholizadeh, H. Eslami, M. Yousefi, M. Asgharzadeh, M. Aghazadeh and H.S. Kafil. "Role of oral microbiome on oral cancers, a review" Biomedicine & Pharmacotherapy, Volume 84, Issue null, Pages 552-558

[5] Manti A, Ciandrini E, Campana R, Dominici S, Ciacci C, Federici S, Sisti D, Rocchi MB, Papa S, Baffone W.
A dual-species microbial model for studying the dynamics between oral streptococci and periodontal pathogens during biofilm development on titanium surfaces by flow cytometry.
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