

# Proteus spp (31-17): sc-57988

## BACKGROUND

*Proteus* is a genus of Gram-negative *Proteobacteria*, which includes pathogens responsible for many human urinary tract infections. *Proteus* exhibit characteristic swarming, and they are part of the normal flora of the gastrointestinal (GI) tract. Three of the *Proteus* species, *P. vulgaris*, *P. mirabilis* and *P. penneri*, are pathogenic to humans, causing chronic urinary tract infections, bacteremia, pneumonia and focal lesions. These species only become pathogenic if present outside the GI tract. *Proteus* species can easily adhere to the kidney urothelium, which facilitates the upper urinary tract. *Proteus* also hydrolyzes urea, which alters the pH of urine and may lead to the formation of kidney stones. Some *Proteus* species are motile, and all are oxidase negative, urease positive, aerobic, rod shaped bacilli that do not ferment lactose.

## REFERENCES

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## SOURCE

Proteus spp (31-17) is a mouse monoclonal antibody raised against *Proteus*.

## RESEARCH USE

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

## PRODUCT

Each vial contains 500 µl culture supernatant IgG<sub>2a</sub> containing with < 0.1% sodium azide.

## APPLICATIONS

Proteus spp (31-17) is recommended for detection of approximately 50% of the *Proteus* species by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

## STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.