

## *Proteus vulgaris*

**Gram reaction and morphology:** Gram negative bacillus, usually singular

**Oxygen requirement:** facultative anaerobe

**Habitat and human pathogenicity:** *P. vulgaris* usually is found to inhabit the intestinal tract of animals, however it can be found in soil, water, fecal matter, and raw meat. It is considered to be an enteric pathogen, however, can cause urinary tract infections and wound infections. It may also cause respiratory infections that persist even after antibiotic treatment. Other species of *Proteus* (i.e. *mirabilis*) is known to be a swarmer, having radiative growth from the point of inoculation. All *Proteus* species, however, are highly motile with peritrichous flagella.

**Colony characteristics (on Nutrient agar plate):**

Size	Medium to large
Color	Shiny, cream-colored colonies

**Biochemical characteristics:**

Test	Result
Lactose fermentation	(-)
Glucose fermentation	(+)
Urease	(+)
Fermentation of mannitol	(-)
H <sub>2</sub> S production	(+)