

Biochemical Test and Identification of *Yersinia pestis*

Basic Characteristics	Properties (<i>Yersinia pestis</i>)
Capsule	Positive (+ve)
Catalase	Positive (+ve)
Citrate	Negative (-ve)
Flagella	Non-Flagellated
Gas	Negative (-ve)
Gelatin Hydrolysis	Negative (-ve)
Gram Staining	Negative (-ve)
Growth in KCN	Negative (-ve)
H ₂ S	Negative (-ve)
Hemolysis	Negative (-ve)
Indole	Negative (-ve)
Motility	Non-Motile
MR (Methyl Red)	Positive (+ve)
Nitrate Reduction	Positive (+ve)
OF (Oxidative-Fermentative)	Facultative anaerobes
Oxidase	Negative (-ve)
Pigment	Negative (-ve)
Shape	Rods
Spore	Negative (-ve)
Urease	Negative (-ve)
VP (Voges Proskauer)	Negative (-ve)
Fermentation of	
Adonitol	Negative (-ve)
Arabinose	Positive (+ve)
Cellobiose	Positive (+ve)
DNase	Negative (-ve)
Dulcitol	Negative (-ve)
Glucose	Positive (+ve)
Glycerol	Variable
Lactose	Negative (-ve)
Malonate	Negative (-ve)
Maltose	Positive (+ve)
Mannitol	Positive (+ve)
Mannose	Positive (+ve)
Melibiose	Variable
Mucate	Negative (-ve)
MyoInositol	Negative (-ve)
Raffinose	Negative (-ve)
Rhamnose	Negative (-ve)
Salicin	Variable
Sorbitol	Variable
Sorbose	Negative (-ve)
Sucrose	Negative (-ve)
Tartrate	Negative (-ve)
Trehalose	Positive (+ve)

Xylose	Positive (+ve)
Enzymatic Reactions	
Acetate Utilization	Negative (-ve)
Aesculine Hydrolysis	Positive (+ve)
Arginine Dehydrolase	Negative (-ve)
Lipase	Negative (-ve)
Lysine	Negative (-ve)
ONPG (β -galactosidase)	Positive (+ve)
Ornithine Decarboxylase	Negative (-ve)
Phenylalanine Deaminase	Negative (-ve)