



***Yersinia pestis* Differentiation Chart**

Differentiation of *Y. pestis* from other Organisms by Conventional Microbiology Procedures

Organism	Gram Stain	Growth on SBA	Growth on MacConkey	Oxidase	Catalase	Urease
<i>Yersinia pestis</i>	Gram negative	Slow	Non-Lactose Fermenter	Negative	Positive	Negative
<i>Yersinia pseudotuberculosis</i>	Gram negative	Slow	Non-Lactose Fermenter	Negative	Positive	Positive
<i>Yersinia enterocolitica</i>	Gram negative	Slow	Non-Lactose Fermenter	Negative	Positive	Positive
<i>Escherichia coli</i>	Gram negative	Good	Lactose Fermenter	Negative	Positive	Negative
<i>Klebsiella pneumoniae</i>	Gram negative	Very good, 2-4 mm colonies 24 hrs.	Lactose Fermenter	Negative	Positive	Positive/ Negative
<i>Enterobacter cloacae</i>	Gram negative	Good	Lactose Fermenter	Negative	Positive	Variable
<i>Pasteurella multocida</i>	Gram negative	Good	Variable	Positive	Positive	Negative

This job aid is a component of the free, on-demand CDC training course “*Yersinia Pestis*.” Find the course at <https://www.reach.cdc.gov/>.

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