BACKGROUND

_Yersinia pestis_ is a gram-negative coccobacillus belonging to the family Enterobacteriaceae. _Y. pestis_ is primarily a rodent pathogen, with humans being an accidental host when bitten by an infected rat flea. It has a number of virulence factors that enable it to survive in humans by facilitating use of host nutrients, causing damage to host cells, and subverting phagocytosis and other host defense mechanisms. The plasmid-encoded protein, virulence antigen (v), is a major protective immunogen that is involved in the translocation of the collection of toxins called _Yersinia_ outer proteins (YOPs). The transcriptional activator PhoP is essential for survival of _Yersinia pestis_ in macrophage phagosomes. However, the phagosomes occupied by _Y. pestis_ have not been well characterized, and the mechanism by which PhoP promotes bacterial survival in these vacuoles is not fully understood.

REFERENCES


SOURCE

_Yersinia pestis_ F1 (YPF19) is a mouse monoclonal antibody raised against purified F1 antigen from _Yersinia pestis_ vaccine strain EB.