SANTA CRUZ BIOTECHNOLOGY, INC.

Yersinia pestis v antigen (Va13): sc-52304

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 esential 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

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SOURCE

Yersinia pestis v antigen (Va13) is a mouse monoclonal antibody raised against recombinant full length v antigen of *Yersinia pestis*.

PRODUCT

Each vial contains 100 µg IgG_1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Yersinia pestis v antigen (Va13) is recommended for detection of Yersinia pestis v antigen of *Yersinia pestis* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of Yersinia pestis v antigen: 41 kDa.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.