SANTA CRUZ BIOTECHNOLOGY, INC.

Se18.9 (B-8): sc-393805

SANTA CRUZ BIOTECHNOLOGY
The Power to Question

BACKGROUND

Se18.9 is a 163 amino acid protein of *Streptococcus equi* origin. Surface proteins of bacterial species are usually involved in interaction with host proteins, and potentially act as biomarkers for serodiagnosis and subunit vaccine components. *Streptococcus equi* subspecies *equi (S. equi)* is a clonal, equine host-adapted pathogen that causes strangles. Strangles is a highly prevalent, highly contagious disease characterized by tonsillitis and lymphadenitis of the head and neck. Some symptoms of strangles may include fever, depression, and submandibular and retropharyngeal lymph node enlargement that can lead to respiratory distress. The infection is transmitted by inhalation of *S. equi* or direct contact with mucopurulent discharge from an infected animal.

REFERENCES

1. Guss, B., et al. 2009. Getting to grips with strangles: an effective multi-component recombinant vaccine for the protection of horses from *Streptococcus equi* infection. PLoS Pathog. 5: e1000584.
2. Boyle, A. 2011. *Streptococcus equi* subspecies *equi* infection (strangles) in horses. Compend. Contin. Educ. Vet. 33: E1-E8.
3. Ivens, P.A., et al. 2011. Molecular characterisation of "strangles" outbreaks in the UK: the use of M-protein typing of *Streptococcus equi* ssp. *equi.* Equine Vet. J. 43: 359-364.
4. Waller, A.S., et al. 2011. *Streptococcus equi:* a pathogen restricted to one host. J. Med. Microbiol. 60: 1231-1240.
5. Mérant, C., et al. 2011. Association of *Streptococcus equi* with equine monocytes. Vet. Immunol. Immunopathol. 143: 83-86.
6. Rodrigues, M.A., et al. 2012. Development of a novel mucosal vaccine against strangles by supercritical enhanced atomization spray-drying of *Streptococcus equi* extracts and evaluation in a mouse model. Eur. J. Pharm. Biopharm. 82: 392-400.
7. Webb, K., et al. 2013. Detection of *Streptococcus equi* subspecies *equi* using a triplex qPCR assay. Vet. J. 195: 300-304.

SOURCE

Se18.9 (B-8) is a mouse monoclonal antibody raised against amino acids 1-163 representing full length Se18.9 of *Streptococcus equi* subsp. *equi* origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Se18.9 (B-8) is available conjugated to agarose (sc-393805 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-393805 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393805 PE), fluorescein (sc-393805 FITC), Alexa Fluor® 488 (sc-393805 AF488), Alexa Fluor® 546 (sc-393805 AF546), Alexa Fluor® 594 (sc-393805 AF594) or Alexa Fluor® 647 (sc-393805 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393805 AF680) or Alexa Fluor® 790 (sc-393805 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Se18.9 (B-8) is recommended for detection of Se18.9 of *Streptococcus equi* strain 4047 origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

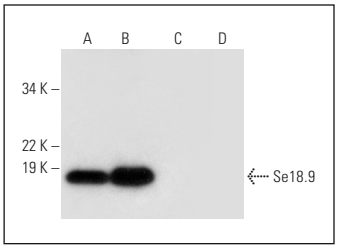
Molecular Weight of Se18.9: 20 kDa.

Positive Controls: *Streptococcus equi* whole cell lysate.

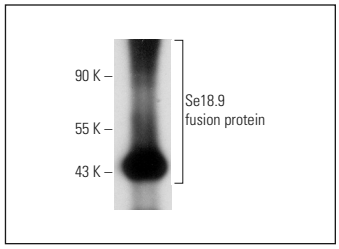
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Se18.9 (B-8): sc-393805. Western blot analysis of Se18.9 expression in *Streptococcus equi* (virulent) (**A**), *Streptococcus equi* (avirulent) (**B**), *Rhodococcus equi* (**C**) and *Escherichia coli* (**D**) whole cell lysates. Note lack of reactivity with unrelated bacterial lysates in lanes **C** and **D**.



Se18.9 (B-8): sc-393805. Western blot analysis of *Streptococcus equi* recombinant Se18.9 fusion protein.

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.