

Se51.9 (F-2): sc-377239

BACKGROUND

Se51.9, also known as surface protein se51.9, is a 237 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

- 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.
- Boyle, A. 2011. *Streptococcus equi* subspecies *equi* infection (strangles) in horses. *Compend. Contin. Educ. Vet.* 33: E1-E7.
- 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.
- Waller, A.S., et al. 2011. *Streptococcus equi*: a pathogen restricted to one host. *J. Med. Microbiol.* 60: 1231-1240.
- Mérant, C., et al. 2011. Association of *Streptococcus equi* with equine monocytes. *Vet. Immunol. Immunopathol.* 143: 83-86.
- 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.
- Webb, K., et al. 2013. Detection of *Streptococcus equi* subspecies *equi* using a triplex qPCR assay. *Vet. J.* 195: 300-304.

SOURCE

Se51.9 (F-2) is a mouse monoclonal antibody raised against amino acids 1-237 representing full length Se51.9 of *Streptococcus equi* subsp. *equi* origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Se51.9 (F-2) is available conjugated to agarose (sc-377239 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-377239 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377239 PE), fluorescein (sc-377239 FITC), Alexa Fluor® 488 (sc-377239 AF488), Alexa Fluor® 546 (sc-377239 AF546), Alexa Fluor® 594 (sc-377239 AF594) or Alexa Fluor® 647 (sc-377239 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-377239 AF680) or Alexa Fluor® 790 (sc-377239 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

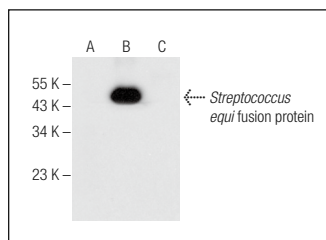
APPLICATIONS

Se51.9 (F-2) is recommended for detection of Surface protein Se51.9 of *Streptococcus equi* subsp. *equi* 4047 and *Streptococcus equi* subsp. *zooepidemicus* MGCS10565 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).

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



Se51.9 (F-2): sc-377239. Western blot analysis of *Streptococcus equi* recombinant Se46.8 (FL-86) (A), Se51.9 (FL-237) (B) and EAG (FL-429) (C) fusion proteins.

SELECT PRODUCT CITATIONS

- Venerall, P., et al. 2020. RUVBL1/RUVBL2 ATPase activity drives PAQosome maturation, DNA replication and radioresistance in lung cancer. *Cell Chem. Biol.* 27: 105-121.e14.

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.

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