

Se46.8 (C-12): sc-377273

BACKGROUND

Se46.8, also known as surface protein Se46.8, is an 86 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-E7.
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. Mé rant, 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

Se46.8 (C-12) is a mouse monoclonal antibody raised against amino acids 1-86 representing full length Se46.8 of *Streptococcus equi* subsp. *equi* origin.

PRODUCT

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

STORAGE

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

PROTOCOLS

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

APPLICATIONS

Se46.8 (C-12) is recommended for detection of Surface protein se46.8 of *S. equi* strains 4047, MGCS10565 and zoonotic *S. equi* 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 Se46.8: 9 kDa.

RESEARCH USE

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