

# eqbJ (A-5): sc-377247

## BACKGROUND

eqbJ, also known as ABC transporter ATP-binding protein, is a 458 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.
- Mérand, 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

eqbJ (A-5) is a mouse monoclonal antibody raised against amino acids 1-225 of *Streptococcus equi* subsp. *equi* origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain 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](http://www.scbt.com) for detailed protocols and support products.

## APPLICATIONS

eqbJ (A-5) is recommended for detection of ABC transporter, ATP-binding component (eqbJ) of *Streptococcus equi* subsp. *equi* 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).

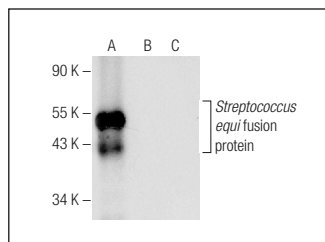
Molecular Weight of eqbJ: 58 kDa.

Positive Controls: *Streptococcus equi* whole cell lysate.

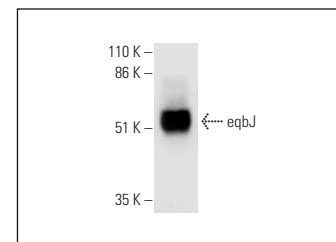
## RECOMMENDED SUPPORT REAGENTS

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



eqbJ (A-5): sc-377247. Western blot analysis of *Streptococcus equi* recombinant eqbJ (amino acids 1-225) (A), eqbJ (amino acids 226-458) (B) and EAG (FL-429) (C) fusion proteins.



eqbJ (A-5): sc-377247. Western blot analysis of eqbJ expression in *Streptococcus equi* whole cell lysate.

## RESEARCH USE

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