

Extracellular solute-binding protein (E-11): sc-398029

BACKGROUND

Streptococcus is a large genus of Gram-positive bacteria that is comprised of over 50 different species, which are classified into α , β or γ hemolytic groups, based on their hemolytic properties. Carbohydrates present on the cell wall further classify β -hemolytic streptococci into Lancefield groups. *Streptococcus equi* subspecies *equi* (*S. equi*) is an equine host-adapted pathogen that causes strangles and belongs to Lancefield group C. 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

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SOURCE

Extracellular solute-binding protein (E-11) is a mouse monoclonal antibody raised against amino acids 1-288 representing full length Extracellular solute-binding protein of *Streptococcus equi* subsp. *equi* 4047 origin.

PRODUCT

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

APPLICATIONS

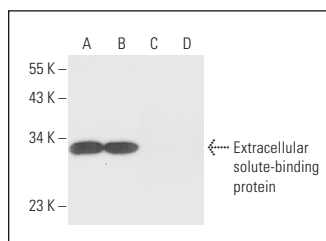
Extracellular solute-binding protein (E-11) is recommended for detection of Extracellular solute-binding protein of *Streptococcus equi* subsp. *equi* 4047 origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (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).

Positive Controls: *Streptococcus equi* (virulent) whole cell lysate or *Streptococcus equi* (avirulent) whole cell lysate.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ 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



Extracellular solute-binding protein (E-11): sc-398029. Western blot analysis of Extracellular solute-binding protein 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.

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.