



Endoglycosidase [EndoS] (B-8): sc-398039

BACKGROUND

Endoglycosidase, also known as EndoS, is a 1,018 amino acid protein enzyme of *Streptococcus equi* origin. EndoS hydrolyses glycosyl groups on IgG, similar to EndoS of *Streptococcus pyogenes* origin. *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. 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.
3. Mérand, C., et al. 2011. Association of *Streptococcus equi* with equine monocytes. *Vet. Immunol. Immunopathol.* 143: 83-86.
4. Waller, A.S., et al. 2011. *Streptococcus equi*: a pathogen restricted to one host. *J. Med. Microbiol.* 60: 1231-1240.
5. Boyle, A. 2011. *Streptococcus equi* subspecies *equi* infection (strangles) in horses. *Compend. Contin. Educ. Vet.* 33: E1-E7.
6. Flock, M., et al. 2012. Antiphagocytic function of an IgG glycosyl hydrolase from *Streptococcus equi* subsp. *equi* and its use as a vaccine component. *Infect. Immun.* 80: 2914-2919.

SOURCE

Endoglycosidase [EndoS] (B-8) is a mouse monoclonal antibody raised against amino acids 1-243 mapping at the N-terminus of Endoglycosidase (EndoS) of *Streptococcus equi* subsp. *equi* 4047 origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Endoglycosidase [EndoS] (B-8) is available conjugated to agarose (sc-398039 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398039 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398039 PE), fluorescein (sc-398039 FITC), Alexa Fluor® 488 (sc-398039 AF488), Alexa Fluor® 546 (sc-398039 AF546), Alexa Fluor® 594 (sc-398039 AF594) or Alexa Fluor® 647 (sc-398039 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398039 AF680) or Alexa Fluor® 790 (sc-398039 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

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

APPLICATIONS

Endoglycosidase [EndoS] (B-8) is recommended for detection of Endoglycosidase (EndoS) 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).

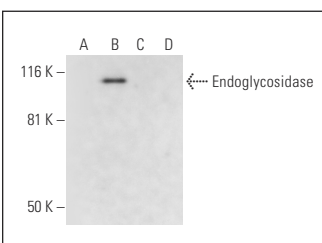
Molecular Weight of Endoglycosidase: 113 kDa.

Positive Controls: *Streptococcus equi* (avirulent) 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



Endoglycosidase [EndoS] (B-8): sc-398039. Western blot analysis of Endoglycosidase 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 *S. equi* virulent strain in lane A, and 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.

PROTOCOLS

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

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