

Datasheet: AAI21B

Description:	SHEEP ANTI BOVINE IgG1:Biotin
Specificity:	IgG1
Format:	Biotin
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	1 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			1:10000 - 1:100000
Western Blotting	▪			1:10000 - 1:100000

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Bovine
Product Form	Purified IgG fraction conjugated to Biotin - liquid
Antiserum Preparation	Antisera to bovine IgG1 were raised by repeated immunisation of sheep with highly purified antigen. Purified IgG was prepared by affinity chromatography.
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Purified bovine IgG1.
Specificity	Sheep anti Bovine IgG1 polyclonal antibody recognizes bovine IgG1. No cross-reactivity with other bovine immunoglobulin classes is seen in immunoelectrophoresis. This product may cross-react with IgG1 from other species.

References

1. Makepeace, B.L. *et al.* (2009) Immunisation with a multivalent, subunit vaccine reduced patent infection in a natural bovine model of Onchocerciasis during intense field exposure. [PLoS Negl. Trop. Dis. 3: e544.](#)
2. Colwell, D.D. *et al.* (2010) *Dicrocoelium dendriticum* in cattle from Cypress Hills, Canada: Humoral response and preliminary evaluation of an ELISA. [Vet Parasitol. 174: 162-5.](#)
3. Assad, A. *et al.* (2012) Immunophenotyping and characterization of BNP colostrum revealed pathogenic alloantibodies of IgG1 subclass with specificity to platelets, granulocytes and monocytes of all maturation stages. [Vet Immunol Immunopathol. 147: 25-34.](#)
4. Ploegaert, T.C. *et al.* (2010) Genetic variation of natural antibodies in milk of Dutch Holstein-Friesian cows. [J Dairy Sci. 93: 5467-73.](#)
5. Lavoria, M.Á. *et al.* (2012) Avidity and subtyping of specific antibodies applied to the indirect assessment of heterologous protection against Foot-and-Mouth Disease Virus in cattle. [Vaccine. 30: 6845-50.](#)
6. Mansilla, F.C. *et al.* (2013) Dose-dependent immunogenicity of a soluble *Neospora caninum* tachyzoite-extract vaccine formulated with a soy lecithin/ β -glucan adjuvant in cattle. [Vet Parasitol. pii: S0304-4017\(13\)00252-5.](#)
7. Panadero, R. *et al.* (2013) Effect of reinfestations on systemic immune responses in cattle naturally infested by *Hypoderma sp.* (Diptera: Oestridae). [Vet Parasitol. 193: 238-44.](#)
8. Van Meulder, F. *et al.* (2013) Granule exocytosis of granulysin and granzyme B as a potential key mechanism in vaccine-induced immunity in cattle against the nematode *Ostertagia ostertagi*. [Infect Immun. 81: 1798-809.](#)
9. Vordermeier, H.M. *et al.* (2003) Improved immunogenicity of DNA vaccination with mycobacterial HSP65 against bovine tuberculosis by protein boosting. [Vet Microbiol. 93: 349-59.](#)
10. Hansen, E.R. *et al.* (1989) Cutaneous T-cell lymphoma lesional epidermal cells activate autologous CD4+ T lymphocytes: involvement of both CD1+OKM5+ and CD1+OKM5- antigen-presenting cells. [J Invest Dermatol. 94: 485-91.](#)
11. Fiedor, C. *et al.* (2009) Evaluation of a milk ELISA for the serodiagnosis of *Dictyocaulus viviparus* in dairy cows. [Vet Parasitol. 166: 255-61.](#)
12. Almería, S. *et al.* (2009) Specific anti-*Neospora caninum* IgG1 and IgG2 antibody responses during gestation in naturally infected cattle and their relationship with gamma interferon production. [Vet Immunol Immunopathol. 130: 35-42.](#)
13. TrottaMyri, a.n. *et al.* (2015) Simultaneous immunization of cattle with foot-and-mouth disease (FMD) and live anthrax vaccines do not interfere with FMD booster responses [Trials in Vaccinology. 4: 38-42.](#)
14. Prado, M.E. *et al.* (2011) Vaccination of dairy cows with recombinant *Streptococcus uberis* adhesion molecule induces antibodies that reduce adherence to and internalization of *S. uberis* into bovine mammary epithelial cells. [Vet Immunol Immunopathol. 141: 201-8.](#)
15. von Holtum, C. *et al.* (2008) Development and evaluation of a recombinant antigen-based ELISA for serodiagnosis of cattle lungworm. [Vet Parasitol. 151: 218-26.](#)
16. Van Neerven, R.J. *et al.* (2010) Milk derived antigen-specific antibodies, methods of preparation and uses thereof. [US Patent application no: US20100129377 A1](#)
17. Grit, G.H. *et al.* (2014) Evaluation of cellular and humoral systemic immune response against *Giardia duodenalis* infection in cattle. [Vet Parasitol. 202: 145-55.](#)
18. van Diemen, P.M. *et al.* (2007) Subunit vaccines based on intimin and Efa-1 polypeptides induce humoral immunity in cattle but do not protect against intestinal colonisation by enterohaemorrhagic *Escherichia coli* O157:H7 or O26:H-. [Vet Immunol Immunopathol. 116: 47-58.](#)
19. Riffault, S. *et al.* (2010) A new subunit vaccine based on nucleoprotein nanoparticles confers partial clinical and virological protection in calves against bovine respiratory syncytial virus. [Vaccine. 28: 3722-34.](#)
20. Vázquez, L. *et al.* (2012) Antigen-specific antibody isotypes, lymphocyte subsets and cytokine profiles in cattle naturally infested by *Hypoderma sp.* (Diptera: Oestridae). [Vet Parasitol. 184: 230-7.](#)
21. Patarroyo, J.H. *et al.* (2009) Immune response of bovines stimulated by synthetic vaccine

- SBm7462 against *Rhipicephalus (Boophilus) microplus*. [Vet Parasitol. 166: 333-9.](#)
22. Maree, F.F. *et al.* (2015) Intra-serotype SAT2 chimeric foot-and-mouth disease vaccine protects cattle against FMDV challenge. [Vaccine. 33 \(25\): 2909-16.](#)
23. Rybarczyk, J. *et al.* (2015) Effects of lactoferrin treatment on *Escherichia coli* O157:H7 rectal colonization in cattle. [Vet Microbiol. pii: S0378-1135\(15\)30119-X. \[Epub ahead of print\]](#)
24. Bautista-Garfias, C.R. *et al.* (2015) Co-immunization of cattle with a vaccine against babesiosis and *Lactobacillus casei* increases specific IgG1 levels to *Babesia bovis* and *B. bigemina*. [Parasitol Int. 64 \(5\): 319-23.](#)
25. González-Hernández A *et al.* (2016) Host protective ASP-based vaccine against the parasitic nematode *Ostertagia ostertagi* triggers NK cell activation and mixed IgG1-IgG2 response. [Sci Rep. 6: 29496.](#)
26. Scott, K.A. *et al.* (2017) Evaluation of immune responses of stabilised SAT2 antigens of foot-and-mouth disease in cattle. [Vaccine. Apr 18 \[Epub ahead of print\].](#)

Storage	Store at +4°C. DO NOT FREEZE. This product should be stored undiluted. Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	For research purposes only

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
----------------------------------	---	------------------	---	---------------	---

'M314499:180412'

Printed on 01 May 2018