

Datasheet: AAI21P

Description:	SHEEP ANTI BOVINE IgG1:HRP
Specificity:	IgG1
Format:	HRP
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
Immunohistology - Frozen			■	
Immunohistology - Paraffin			■	
ELISA	■			1/10,000 - 1/100,000
Western Blotting			■	

Where this antibody 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 antibody for use in their own system using the appropriate negative/positive controls.

Target Species	Bovine
-----------------------	--------

Product Form	Purified IgG conjugated to Horseradish Peroxidase (HRP) - liquid
---------------------	--

Antiserum Preparation Antisera to bovine IgG1 were raised by repeated immunisation of sheep with highly purified antigen. Purified IgG prepared by affinity chromatography.

Buffer Solution	Phosphate buffered saline
------------------------	---------------------------

Preservative Stabilisers	0.05% Proclin™ 300
---------------------------------	--------------------

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 colostra 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 granzyme B 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	12 months from date of despatch.
Acknowledgements	Proclin™ 300 is a trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow.
Health And Safety Information	Material Safety Datasheet documentation #20392 available at: 20392: https://www.bio-rad-antibodies.com/uploads/MSDS/20392.pdf
Regulatory	For research purposes only

Related Products

Recommended Useful Reagents

[AbGUARD® HRP STABILIZER PLUS \(BUF052A\)](#)

[AbGUARD® HRP STABILIZER PLUS \(BUF052B\)](#)

[AbGUARD® HRP STABILIZER PLUS \(BUF052C\)](#)

[TMB CORE \(BUF056A\)](#)

[TMB CORE+ \(BUF062A\)](#)

[TMB SIGNAL+ \(BUF054A\)](#)

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
----------------------------------	---	------------------	---	---------------	---

'M314514:180412'

Printed on 01 May 2018