

# Datasheet: AAI22F BATCH NUMBER 161347

Description:	SHEEP ANTI BOVINE IgG2:FITC
Specificity:	lgG2
Format:	FITC
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 <a href="https://www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	•			1/20 - 1/100
Immunohistology - Frozen	•			1/20 - 1/100
Immunohistology - Paraffin			•	

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 fraction	on conjugated to Fluoresc	ein Isothiocyanate Is	omer 1 (FITC) - liquid
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)	
	FITC	490	525	

**Antiserum Preparation** Antisera to bovine IgG2 were raised by repeated immunisation of sheep with highly purified antigen. Purified IgG prepared by affinity chromatography.

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml

Immunogen	Purified bovine IgG2.
RRID	AB_323067
Specificity	Sheep anti Bovine IgG2 polyclonal antibody recognizes bovine IgG2.
	No cross - reactivity with other bovine immunoglobulin classes is seen in immunoelectrophoresis. This product may cross-react with IgG2 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. & Goater, C.P. (2010) *Dicrocoelium dendriticum* in cattle from Cypress Hills, Canada: humoral response and preliminary evaluation of an ELISA. <u>Vet Parasitol.</u> 174 (1-2): 162-5.
- 3. Agnes, J.T. *et al.* (2011) Identification of *Anaplasma marginale* Outer Membrane Protein Antigens Conserved between *A. marginale* Sensu Stricto Strains and the Live *A. marginale* subsp. centrale Vaccine Infect Immun. 79: 1311-8.
- 4. Assad, A. *et al.* (2012) Immunophenotyping and characterization of BNP colostra revealed pathogenic alloantibodies of IgG1 subclass with specifity to platelets, granulocytes and monocytes of all maturation stages. <u>Vet Immunol Immunopathol. 147: 25-34.</u>
- 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. <u>Vaccine</u>. 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. <u>Vet Parasitol. 197 (1-2): 13-21.</u>
- 7. Panadero, R. *et al.* (2013) Effect of reinfestations on systemic immune responses in cattle naturally infested by *Hypoderma sp.* (Diptera: Oestridae). <u>Vet Parasitol. 193:</u> 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. Pecora, A. *et al.* (2015) Development of an APC-targeted multivalent E2-based vaccine against Bovine Viral Diarrhea Virus types 1 and 2. Vaccine. 33 (39): 5163-71.
- 10. 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.
- 11. 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. <u>Sci Rep. 6: 29496.</u>
- 12. Rainard, P. et al. (2017) Cellular and humoral immune response to recombinant *Escherichia coli*. OmpA in cows. PLoS One. 12 (10): e0187369.
- 13. Scott, K.A. *et al.* (2017) Evaluation of immune responses of stabilised SAT2 antigens of foot-and-mouth disease in cattle. <u>Vaccine</u>. 35 (40): 5426-33.
- 14. Rybarczyk, J. *et al.* (2017) Effects of lactoferrin treatment on Escherichia coli O157:H7 rectal colonization in cattle. <u>Vet Microbiol. 202: 38-46.</u>
- 15. Sheng, Z.A. et al. (2019) Th2-related cytokines are associated with Fasciola gigantica

infection and evasion in the natural host, swamp buffalo. <u>Vet Parasitol. 268: 73-80.</u>

16. Bucafusco, D .et al. (2019) Immune cells transferred by colostrum do not influence the immune responses to foot-and-mouth disease primary vaccination. <u>J Dairy Sci. 102 (9):</u> 8376-84.

17. Jiménez-Pelayo, L. *et al.* (2019) Early *Neospora caninum* infection dynamics in cattle after inoculation at mid-gestation with high (Nc-Spain7)- or low (Nc-Spain1H)-virulence isolates. <u>Vet Res. 50 (1): 72.</u>

18. Springer, A.*et al.* (2022) Immunization Trials with Recombinant Major Sperm Protein of the Bovine Lungworm *Dictyocaulus viviparus*.. <u>Pathogens 2022, 11, 55.</u>

Storage	Store at +4°C. DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee	12 months from date of despatch	
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/AAI22F">https://www.bio-rad-antibodies.com/SDS/AAI22F</a> 10040	
Regulatory	For research purposes only	

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

'M363606:200528'

### Printed on 01 Mar 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint