

Datasheet: MCA2170F

BATCH NUMBER 174024

Description:	MOUSE ANTI CHICKEN Bu-1a:FITC
Specificity:	Bu-1a
Other names:	BURSAL ANTIGEN 1 A
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	L22
Isotype:	IgG1
Quantity:	0.1 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	▪			1/20 - 1/80

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	Chicken		
Species Cross Reactivity	Reacts with: Quail		
	Does not react with:Turkey, Guinea Fowl		
	N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.		
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% sodium azide (NaN ₃) 1% bovine serum albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	Chicken Bursa cells.
External Database Links	UniProt: Q90746 Related reagents
RRID	AB_2234729
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the mouse SP2/0-Ag14 myeloma cell line.
Specificity	Mouse anti Chicken Bu-1a, clone L22 recognises the 'a' allele of the polymorphic cell surface antigen Bu-1, also known as chB6. Bu-1a is a 70 kDa alloantigen expressed on B cells and a subset of macrophages. Bu-1 is expressed on B cell precursors at early stages of development (Houssaint <i>et al.</i> 1991). Weak cross-reactivity with Bu-1b may be seen at higher antibody levels. This may be removed by appropriate titration. Mouse anti chicken BU-1a, clone L22 cross reacts with quail Bu-1 but does not appear reactive with either turkey or guinea fowl tissues (Igyarto <i>et al.</i> 2008)
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 ⁶ cells in 100µl
References	- Veromaa, T. <i>et al.</i> (1988) Monoclonal antibodies against chicken Bu-1a and Bu-1b alloantigens. Hybridoma. 7: 41-8. - Houssaint, E. <i>et al.</i> (1989) Bu-1 antigen expression as a marker for B cell precursors in chicken embryos. Eur J Immunol. 19 (2): 239-43. - Houssaint, E. <i>et al.</i> (1991) Early separation of B and T lymphocyte precursors in chick embryo. J Exp Med. 174: 397-406. - Tregaskes, C.A. <i>et al.</i> (1996) Chicken B-cell marker chB6 (Bu-1) is a highly glycosylated protein of unique structure. Immunogenetics. 44: 212-7. - Igyártó, B.Z. <i>et al.</i> (2008) Identification of the avian B-cell-specific Bu-1 alloantigen by a novel monoclonal antibody. Poult Sci. 87: 351-5. - Chaussé, A.M. <i>et al.</i> (2011) Expression of toll-like receptor 4 and downstream effectors in selected cecal cell subpopulations of chicks resistant or susceptible to salmonella carrier state. Infect Immun. 79: 3445-54. - Chaussé, A.M. <i>et al.</i> (2014) Susceptibility to Salmonella carrier-state: a possible Th2 response in susceptible chicks. Vet Immunol Immunopathol. 159: 16-28. - Balic, A. <i>et al.</i> (2014) Visualisation of chicken macrophages using transgenic reporter genes: insights into the development of the avian macrophage lineage. Development. 141: 3255-65.

9. Luna-Acosta, J.L. *et al.* (2015) Direct antiapoptotic effects of growth hormone are mediated by PI3K/Akt pathway in the chicken bursa of Fabricius. [Gen Comp Endocrinol. 224: 148-59.](#)
10. Jarosz, Ł. *et al.* (2017) The effect of feed supplementation with zinc chelate and zinc sulphate on selected humoral and cell-mediated immune parameters and cytokine concentration in broiler chickens. [Res Vet Sci. 112: 59-65.](#)
11. Smialek, M. *et al.* (2017) Immunological aspects of the efficiency of protectotype vaccination strategy against chicken infectious bronchitis. [BMC Vet Res. 13 \(1\): 44.](#)
12. Jarosz, Ł.S *et al.* (2018) The effect of feed supplementation with a copper-glycine chelate and copper sulphate on selected humoral and cell-mediated immune parameters, plasma superoxide dismutase activity, ceruloplasmin and cytokine concentration in broiler chickens. [J Anim Physiol Anim Nutr \(Berl\). 102 \(1\): e326-e36.](#)
13. Härtle, S. *et al.* (2024) Delineation of chicken immune markers in the era of omics and multicolor flow cytometry [Frontiers in Veterinary Science. 23 May \[Epub ahead of print\].](#)

Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C. Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2170F
Regulatory	For research purposes only

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M451072:260701'

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