

Datasheet: MCA800F BATCH NUMBER 159424

| Description: | MOUSE ANTI RABBIT T LYMPHOCYTES:FITC | |
|----------------------|--------------------------------------|--|
| Specificity: | T LYMPHOCYTES | |
| Other names: | CD5-LIKE | |
| Format: | FITC | |
| Product Type: | Monoclonal Antibody | |
| Clone: | KEN-5 | |
| Isotype: | IgG1 | |
| Quantity: | 100 TESTS | |
| | | |

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 | | | | Neat |
| Immunohistology - Frozen | | | • | |
| 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 appropriate negative/positive controls.

| Target Species | Rabbit | | | | |
|-----------------------------|-----------------------------------|---------------------------|--------------------|---------------------|--|
| Species Cross Reactivity | Does not react with:N | Does not react with:Mouse | | | |
| Product Form | Purified IgG conjugat | ed to Fluorescein Isotl | niocyanate Isomer | 1 (FITC) - liquid | |
| Max Ex/Em | Fluorophore | Excitation Max (nm) | Emission Max (nr | n) | |
| | FITC | 490 | 525 | | |
| Preparation | Purified IgG prepared supernatant | d by affinity chromatog | raphy on Protein A | from tissue culture | |
| Buffer Solution | Phosphate buffered s | aline | | | |

| Preservative | 0.09% Sodium Azide |
|-----------------------------------|---|
| Stabilisers | 1% Bovine Serum Albumin |
| Approx. Protein Concentrations | IgG concentration 0.1 mg/ml |
| Immunogen | Rabbit Thymocytes |
| RRID | AB_321388 |
| Fusion Partners | Spleen cells from immunised BALB/c mice were fused with cells of the PAI mouse myeloma cell line |
| Specificity | Mouse anti Rabbit T lymphocytes, clone KEN-5 , recognizes rabbit (lapine) T-cells. Clone KEN-5 recognizes >90% thymocytes and approximately 40-45% mesenteric lymph node cells and immunoprecipitates a ~67 kDa protein from rabbit thymocytes. |
| | In contrast to humans and mice where only a very small population of B-cells express the CD5 antigen, in rabbits it is widely expressed by peripheral blood B cells. However, the KEN-5 antibody, while originally reported as recognizing rabbit CD5 (Kotani et al.1993), does not bind to rabbit CD5 transfectants. Furthermore, clone KEN-5, unlike other known antibodies recognizing rabbit CD5 and anti human cross reactive CD5 antibodies, shows very limited binding to rabbit B-cells, which in adult rabbits express CD5 (Raman & Knight 1992) Clone KEN-5 may recognize a epitope that is dependant on glycosylation to maintain its structural configuration which may explain why this antibody does not recognize recombinant rabbit CD5 produced in insect cells which contain different glycans from those found in mammalian cells. KEN-5 may distinguish between different isoforms of CD5 in lapine T and B cells (Pospisil et al. 2009). |
| Flow Cytometry | Use 10ul of the suggested working dilution to label 10 ⁶ cells or 100ul whole blood |
| References | Matsumura, T. <i>et al.</i> (1999) Suppression of atherosclerotic development in Watanabe heritable hyperlipidemic rabbits treated with an oral antiallergic drug, tranilast. <u>Circulation. 99 (7): 919-24.</u> Gu, W. <i>et al.</i> (2004) Immune response in rabbit ovaries following infection of a recombinant myxoma virus expressing rabbit zona pellucida protein B. <u>Virology. 318 (2):</u> |
| | 516-23. Hoefer, I.E. et al. (2005) Leukocyte subpopulations and arteriogenesis: specific role of monocytes, lymphocytes and granulocytes. Atherosclerosis. 181 (2): 285-93. Dewals, B. et al. (2008) Malignant catarrhal fever induced by alcelaphine herpesvirus 1 is associated with proliferation of CD8+ T cells supporting a latent infection. PLoS One. 3 (2): e1627. Gillet, L. et al. (2009) Anchoring tick salivary anti-complement proteins IRAC I and IRAC II to membrane increases their immunogenicity. Vet Res. 40: 51. |

- IRAC II to membrane increases their immunogenicity. Vet Res. 40: 51.
- 6. Guerrero, I. *et al.* (2010) Evolution of the peripheral blood lymphocyte populations in multiparous rabbit does with two reproductive management rhythms. <u>Vet Immunol Immunopathol. 140: 75-81.</u>
- 7. Milanovic, V. et al. (2017) Histological and immunological changes in uterus during the

- different reproductive stages at Californian rabbit (*Oryctolagus cuniculus*). <u>Kafkas Univ Vet</u> Fak Derg, 23, 137-44.
- 8. Penadés, M. *et al.* (2018) Long-term implications of feed energy source in different genetic types of reproductive rabbit females. II. Immunologic status. <u>Animal. 12 (9):</u> 1877-85.
- 9. Gates, K.V. & Griffiths, L.G. (2018) Chronic graft-specific cell-mediated immune response toward candidate xenogeneic biomaterial. Immunol Res. 66 (2): 288-98.
- 10. Penadés, M.*et al.* (2019) Early deviations in performance, metabolic and immunological indicators affect stayability in rabbit females. Animal.: 1-10.
- 11. Niedźwiedzka-Rystwej, P. *et al.* (2020) B and T lymphocytes in rabbits change according to the sex and throughout the year. Pol J Vet Sci. 23 (1): 37-42.
- 12. Muñoz-Silvestre, A. *et al.* (2020) Pathogenesis of Intradermal Staphylococcal Infections: Rabbit Experimental Approach to Natural *Staphylococcus aureus* Skin Infections. Am J Pathol. 190 (6): 1188-210.
- 13. Lin, W. *et al.* (2020) Rapid identification of anti-idiotypic mAbs with high affinity and diverse epitopes by rabbit single B-cell sorting-culture and cloning technology. <u>PLoS One.</u> 15 (12): e0244158.
- 14. Niedźwiedzka-Rystwej, P. *et al.* (2021) Reactivity of selected markers of innate and adaptive immunity in rabbits experimentally infected with antigenic variants of RHD (Lagovirus europaeus/GI.1a). <u>Vet Res Commun. Oct 29 [Epub ahead of print].</u>
- 15. Noreng, S. *et al.* (2022) Structure of the core human NADPH oxidase NOX2. <u>Nat Commun.</u> 13 (1): 6079.
- 16. Dewals, B.G. & Vanderplasschen, A. (2011) Malignant catarrhal fever induced by Alcelaphine herpesvirus 1 is characterized by an expansion of activated CD3+CD8+CD4-T cells expressing a cytotoxic phenotype in both lymphoid and non-lymphoid tissues. <u>Vet Res. 42 (1): 95.</u>
- 17. Myster, F. *et al.* (2015) Viral semaphorin inhibits dendritic cell phagocytosis and migration but is not essential for gammaherpesvirus-induced lymphoproliferation in malignant catarrhal fever. J Virol. 89 (7): 3630-47.

Further Reading

1. Raman, C. & Knight, K.L. (1992) CD5+ B cells predominate in peripheral tissues of rabbit. <u>J Immunol</u>. 149 (12): 3858-64.

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/MCA800F 10041 |
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Regulatory

For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

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

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M385010:210513'

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