

## Datasheet: MCA489

<b>Description:</b>	MOUSE ANTI ADENOVIRUS
<b>Specificity:</b>	ADENOVIRUS
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	B025 (AD51)
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			
ELISA	▪			
Immunoprecipitation			▪	
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 appropriate negative/positive controls.

**(1) This product requires protein digestion pre-treatment of paraffin sections e.g. trypsin or pronase.**

<b>Target Species</b>	Viral
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	<0.1% Sodium Azide (NaN <sub>3</sub> )

<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Adenovirus type 3.
<b>RRID</b>	AB_321166
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the JK.Ag8.653 mouse myeloma cell line.
<b>Specificity</b>	<b>Mouse anti adenovirus antibody, clone B025 (AD51)</b> recognizes all human adenoviruses serotypes.

The most common infections caused by adenovirus are respiratory tract infections but some infections may also lead to conjunctivitis, skin-rash, diarrhea and bladder infections. Infant and children are most commonly affected by adenoviruses.

Adenoviruses are icosahedral non-enveloped linear double-stranded DNA viruses. There are at least 51 serotypes, which are categorized into 6 species (A-F) based on molecular criteria. The virus capsid is composed of three different proteins: 12 fiber attachment proteins associated with 12 penton base proteins and 240 hexon proteins, which form the main capsid component ([Ebner et al. 2005](#)).

Mouse anti adenovirus antibody, clone B025 (AD51) reacts with the adenovirus specific hexon polypeptide.

Due to their infectivity to both quiescent and proliferating cells, adenoviruses have also been used as vectors in vaccination and in gene therapy ([Thomas et al. 2002](#) and [Abad et al. 2002](#)).

<b>Purity</b>	>90% IgG content by SDS page
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**References**

- Maddox, A. *et al.* (1992) Adenovirus infection of the large bowel in HIV positive patients. [J Clin Pathol. 45 \(8\): 684-8.](#)
- Thomas, C.E. *et al.* (2002) Adenovirus binding to the coxsackievirus and adenovirus receptor or integrins is not required to elicit brain inflammation but is necessary to transduce specific neural cell types. [J Virol. 76: 3452-60.](#)
- Abad, L.W. *et al.* (2002) Development of a biosensor-based method for detection and isotyping of antibody responses to adenoviral-based gene therapy vectors. [Anal Biochem. 2002 Nov 1;310\(1\):107-13.](#)
- Audu, R. *et al.* (2002) Isolation and identification of adenovirus recovered from the stool of children with diarrhoea in Lagos, Nigeria. [Afr J Health Sci. 9: 105-11.](#)
- Griesche, N. *et al.* (2008) Growth characteristics of human adenoviruses on porcine cell lines. [Virology. 373: 400-10.](#)
- Blanshard, C. and Gazzard, B.G. (1995) Natural history and prognosis of diarrhoea of unknown cause in patients with acquired immunodeficiency syndrome (AIDS). [Gut. 36: 283-6.](#)
- Thomas, P.D. *et al.* (2001) Enteric viral infections as a cause of diarrhoea in the

- acquired immunodeficiency syndrome. [HIV Med. 1: 19-24.](#)
8. Blanshard, C. *et al.* (1996) Investigation of chronic diarrhoea in acquired immunodeficiency syndrome. A prospective study of 155 patients. [Gut. 39: 824-32.](#)
9. Morfin, F. *et al.* (2005) *In vitro* susceptibility of adenovirus to antiviral drugs is species-dependent. [Antivir Ther. 10: 225-9.](#)
10. Gularte, S.J. *et al.* (2021) Functionalized Surfaces as a Tool for Virus Sensing: A Demonstration of Human mastadenovirus Detection in Environmental Waters [Chemosensors. 9 \(2\): 19.](#)

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**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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

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|---|---|
| Goat Anti Mouse IgG (STAR77...)         | <a href="#">HRP</a>   |
| Rabbit Anti Mouse IgG (STAR12...)       | <a href="#">RPE</a>   |
| Human Anti Mouse IgG2a (HCA037...)      | <a href="#">HRP</a>   |
| Goat Anti Mouse IgG (STAR70...)         | <a href="#">FITC</a>  |
| Goat Anti Mouse IgG IgA IgM (STAR87...) | <a href="#">Alk. Phos.</a> , <a href="#">HRP</a>  |
| Rabbit Anti Mouse IgG (STAR9...)        | <a href="#">FITC</a>  |
| Goat Anti Mouse IgG (H/L) (STAR117...)  | <a href="#">Alk. Phos.</a> , <a href="#">DyLight@488</a> , <a href="#">DyLight@550</a> ,<br><a href="#">DyLight@650</a> , <a href="#">DyLight@680</a> , <a href="#">DyLight@800</a> ,<br><a href="#">FITC</a> , <a href="#">HRP</a> |
| Goat Anti Mouse IgG (STAR76...)         | <a href="#">RPE</a>   |
| Rabbit Anti Mouse IgG (STAR13...)       | <a href="#">HRP</a>   |
| Goat Anti Mouse IgG (Fc) (STAR120...)   | <a href="#">FITC</a> , <a href="#">HRP</a>  |

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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](https://www.bio-rad-antibodies.com/datasheets)

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