

Datasheet: MCA4756GT

**BATCH NUMBER 162342**

<b>Description:</b>	RAT ANTI HUMAN AID
<b>Specificity:</b>	AID
<b>Other names:</b>	ACTIVATION-INDUCED CYTIDINE DEAMINASE
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	EK2-5G9
<b>Isotype:</b>	IgG2b
<b>Quantity:</b>	50 µg

## 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 (1)	▪			
Immunohistology - Frozen			▪	
Immunohistology - Paraffin (2)	▪			
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting	▪			

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.

**(1)Membrane permeabilisation is required for this application. Bio-Rad recommends the use of Leucoperm™ (Product Code [BUF09](#)) for this purpose.**

**(2)This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. EDTA pH8.0 is recommended for this purpose.**

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G 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>	Synthetic peptide corresponding to amino acids 185-198 of human AID.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q9GZX7</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">57379</a>    AICDA    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	AID
<b>RRID</b>	AB_2224241
<b>Fusion Partners</b>	Spleen cells from Long Evans rats were fused with cells of the P3X63-Ag8.653 myeloma cell line.
<b>Specificity</b>	<p><b>Rat anti Human AID antibody, clone EK2-5G9</b> recognizes human Single-stranded DNA cytosine deaminase, also known as Activation-induced cytidine deaminase or Cytidine aminohydrolase. AID is a 198 amino acid ~24 kDa RNA-editing enzyme essential for the initiation of immunoglobulin class switch recombination, somatic hypermutation and gene conversion.</p> <p>AID is selectively expressed by germinal centre B cells and B cell-derived lymphomas (<a href="#">Basso et al. 2012</a>). Mutation in the AICDA gene is responsible for the autosomal recessive condition Immunodeficiency with hyper-IgM 2 (<a href="#">HIGM2</a>) A rare immunodeficiency syndrome characterized by normal or elevated serum IgM levels with absence of IgG, IgA, and IgE resulting in extreme susceptibility to bacterial infection.</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul.
<b>Histology Positive Control Tissue</b>	Germinal centre B cells
<b>Storage</b>	<p>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.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>
<b>Guarantee</b>	12 months from date of despatch

**Health And Safety Information** Material Safety Datasheet documentation #10040 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA4756GT>  
10040

---

**Regulatory** For research purposes only

---

## Related Products

### Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®800</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight®800</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>

### Recommended Negative Controls

[RAT IgG2b NEGATIVE CONTROL \(MCA6006GA\)](#)

<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>
----------------------------------	---	------------------	---	---------------	---

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)  
'M389562:210806'

Printed on 25 Mar 2023

---

© 2023 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)