

Datasheet: MCA4756GT

### **BATCH NUMBER 162099**

Description:	RAT ANTI HUMAN AID		
Specificity:	AID		
Other names:	ACTIVATION-INDUCED CYTIDINE DEAMINASE		
Format:	Purified		
Product Type:	Monoclonal Antibody		
Clone:	EK2-5G9		
Isotype:	lgG2b		
Quantity:	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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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<sup>™</sup> (Product Code <u>BUF09</u>) 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.

Target Species	Human	
Product Form	Purified IgG - liquid	
Preparation	Purified IgG prepared by affinity chromatography on Protein C supernatant	3 from tissue culture

Buffer Solution	Phosphate buffered saline			
Preservative Stabilisers	<0.1% Sodium Azide (NaN <sub>3</sub> )			
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml			
Immunogen	Synthetic peptide corresponding to amino acids 185-198 of human AID.			
External Database Links	UniProt:  Q9GZX7 Related reagents  Entrez Gene:  57379 AICDA Related reagents			
Synonyms	AID			
RRID	AB_2224241			
Fusion Partners	Spleen cells from Long Evans rats were fused with cells of the P3X63-Ag8.653 myeloma cell line.			
Specificity	Rat anti Human AID antibody, clone EK2-5G9 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.			
	AID is selectively expressed by germinal centre B cells and B cell-derived lymphomas ( <u>Basso et al. 2012</u> ). Mutation in the AICDA gene is responsible for the autosomal recessive condition Immunodeficiency with hyper-IgM 2 ( <u>HIGM2</u> ) 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.			
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul.			
Histology Positive Control Tissue	Germinal centre B cells			
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.			

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...)

Goat Anti Rat IgG (STAR73...)

Rabbit Anti Rat IgG (STAR17...)

FITC

Goat Anti Rat IgG (STAR72...)

HRP

Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...) <u>DyLight®550</u>, <u>DyLight®650</u>, <u>DyLight®800</u>

Rabbit Anti Rat IgG (STAR21...) HRP

Rabbit Anti Rat IgG (STAR16...) <u>DyLight®800</u>
Goat Anti Rat IgG (STAR131...) <u>Alk. Phos., Biotin</u>

# **Recommended Negative Controls**

### RAT IgG2b NEGATIVE CONTROL (MCA6006GA)

 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 'M389562:210806'

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