# Datasheet: MCA2704GA **BATCH NUMBER 167096**

Description:	MOUSE ANTI HUMAN CD300a		
Specificity:	CD300a		
Other names:	IRp60		
Format:	Purified		
Product Type:	Monoclonal Antibody		
Clone:	MEM-260		
Isotype:	lgG1		
Quantity:	0.1 mg		

## **Product Details**

Stabilisers

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.biorad-antibodies.com/protocols.

		0010.			
		Yes	No	Not Determined	Suggested Dilution
	Flow Cytometry	-			
	Immunohistology - Frozen			•	
	Immunohistology - Paraffin			•	
	ELISA			•	
	Immunoprecipitation			•	
	Western Blotting	-			
	Where this product has n	ot been t	tested for	use in a particular tech	nique this does not
	necessarily exclude its us			·	•
	-		•		
	a guide only. It is recomn	nended ti	hat the us	er titrates the product i	or use in their own
	system using appropriate	enegative	e/positive	controls.	
Target Species	Human				
Product Form	Purified IgG - liquid				
Preparation	Purified IgG prepared by	affinity c	hromatog	raphy on Protein A fror	n tissue culture
	supernatant.				
Buffer Solution	Phosphate buffered salin	е			
Preservative					
Stabilisers	<0.1% Sodium Azide (Na	aN <sub>3</sub> )			

Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	Human HPB acute lymphoid leukaemia cell line.
External Database Links	UniProt:   Q9UGN4 Related reagents   Entrez Gene:   11314 CD300A Related reagents
Synonyms	CMRF35H, IGSF12
RRID	AB_2073994
Specificity	Mouse anti Human CD300a antibody, clone MEM-260 recognizes human CD300a, otherwise known as IRp60 or inhibitory receptor protein 60, CD300a is a ~60 kDa transmembrane glycoprotein expressed by natural killer cells (NK), T and B cell subsets, monocytes, neutrophils, macrophages, granulocytes, dendritic cells (DC) and mast cells. Cross-linking of CD300a on NK results in a down-regulation of their cytolytic activity, whilst cross-linking of CD300a on mast cells, inhibits IgE-induced degranulation and SCF-mediated survival. Furthermore, cross-linking of CD300a on the surface of eosinophils has been shown to significantly inhibit their survival, chemotaxis and activation in response to certain inflammatory cytokines, whilst eosinophil-derived MBP (major basic protein) and EDN (neurotoxin), can down-regulate CD300a expression on mast cells <i>in vitro</i> (Bachelet <i>et al</i> .).
Flow Cytometry	Use 10ul of the suggested working dilution to label $1 \times 10^6$ cells in 100ul.
Western Blotting	MCA2704GA detects a band of approximately 60kDa in HPB cell lysates under non-reducing conditions.
References	1. Sabato, V. <i>et al.</i> (2012) CD300a is expressed on human basophils and seems to inhibit IgE/FccRI-dependent anaphylactic degranulation. <u>Cytometry B Clin Cytom. 82 (3): 132-8.</u> 2. Kim, E.J. <i>et al.</i> (2012) CD300a and CD300f differentially regulate the MyD88 and TRIF-mediated TLR signalling pathways through activation of SHP-1 and/or SHP-2 in human monocytic cell lines. <u>Immunology. 135: 226-35.</u>
Further Reading	1. Bachelet, I. <i>et al.</i> (2005) The inhibitory receptor IRp60 (CD300a) is expressed and functional on human mast cells. <u>J Immunol. 175 (12): 7989-95.</u>
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.

Guarantee	ee 12 months from date of despatch				
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA2704GA 10040				
Regulatory	For research purposes only				

### Related Products

#### **Recommended Secondary Antibodies**

Goat Ant	Mouse IgG (STAR76)	RP	<u> </u>		
Rabbit Ar	nti Mouse IgG (STAR13)	HR	<u>P</u>		
Goat Ant	Mouse IgG (STAR70)	<u>FIT</u>	<u>C</u>		
Goat Ant	Mouse IgG (H/L) (STAR1	17) <u>Alk</u>	<u>Phos., DyLight®488, I</u>	DyLight®550	,
		DyL	ight®650, DyLight®68	0, DyLight®8	300,
		<u>FIT</u>	<u>C, HRP</u>		
Goat Ant	Mouse IgG (Fc) (STAR12	0) <u>FIT</u>	<u>C, HRP</u>		
Goat Anti	Mouse IgG (STAR77)	HR	<u>P</u>		
Rabbit Ar	nti Mouse IgG (STAR9)	FIT	<u> </u>		
Recomn	nended Negative Contr	ols			
	G1 NEGATIVE CONTROL (N				
North & South	Tel: +1 800 265 7376	Vorldwide	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 'M389462:210806'

#### Printed on 18 Jan 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint