

Datasheet: MCA2044

BATCH NUMBER 162097

Description:	MOUSE ANTI HUMAN HLA G
Specificity:	HLA G
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	MEM-G/9
Isotype:	IgG1
Quantity:	0.2 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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			
Immunohistology - Frozen (1)	▪			
Immunohistology - Paraffin		▪		
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting		▪		
Immunofluorescence	▪			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

(1)The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A
Buffer Solution	Phosphate buffered saline
Preservative	<0.1% Sodium Azide (NaN ₃)

Stabilisers

Approx. Protein Concentrations

IgG concentration 1.0mg/ml

Immunogen

Recombinant human HLA-G refolded with beta 2 microglobulin.

External Database Links

UniProt:

[P17693](#)

[Related reagents](#)

Entrez Gene:

[3135](#)

HLA-G

[Related reagents](#)

Synonyms

HLA-6.0, HLAG

RRID

AB_323364

Fusion Partners

Spleen cells from immunised Balb/c mice were fused with myeloma cells.

Specificity

Mouse anti Human HLA G antibody, clone MEM-G/9 recognizes human HLA-G, a non-classical major histocompatibility complex (MHC) molecule. HLA-G expression is restricted to trophoblast cells and some medullary thymic epithelial cells. Several isoforms of the HLA-G molecule exist, which include the membrane bound isoforms HLA-G1 – G4 and soluble isoforms HLA-G5 – G7. Clone MEM-G/9 specifically recognizes surface expressed native HLA-G1, when associated with beta 2 microglobulin, but not does recognize the isoforms HLA-G2, G3 and G4. CMouse anti Human HLA G antibody, clone MEM-G/9 has also been reported to recognize the soluble isoform HLA-G5.

Flow Cytometry

Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.

References

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3. Kotze, D.J. *et al.* (2010) Embryo selection criteria based on morphology VERSUS the expression of a biochemical marker (sHLA-G) and a graduated embryo score: prediction of pregnancy outcome. [J Assist Reprod Genet. 27 \(6\): 309-16.](#)
4. Guetta, E. *et al* (2005) Trophoblasts isolated from the maternal circulation: *in vitro* expansion and potential application in non-invasive prenatal diagnosis. [J Histochem Cytochem. 53: 337-9.](#)
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9. Manaster, I. *et al.* (2012) MiRNA-mediated control of HLA-G expression and function. [PLoS One. 7: e33395.](#)
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11. Yao, Y.Q. *et al.* (2005) Differential expression of alternatively spliced transcripts of HLA-G in human preimplantation embryos and inner cell masses. [J Immunol. 175 \(12\): 8379-85.](#)
12. de Carvalho, J.F. *et al.* (2012) Heparin increases HLA-G levels in primary antiphospholipid syndrome. [Clin Dev Immunol. 2012: 232390.](#)
13. Guenther, S. *et al.* (2012) Decidual macrophages are significantly increased in spontaneous miscarriages and over-express FasL: a potential role for macrophages in trophoblast apoptosis. [Int J Mol Sci. 13 \(7\): 9069-80.](#)
14. Apps, R. *et al.* (2011) Genome-wide expression profile of first trimester villous and extravillous human trophoblast cells. [Placenta. 32 \(1\): 33-43.](#)
15. Lim DS *et al.* (2014) The combination of type I IFN, TNF- α , and cell surface receptor engagement with dendritic cells enables NK cells to overcome immune evasion by dengue virus. [J Immunol. 193 \(10\): 5065-75.](#)
16. Reches, A. *et al.* (2016) HNRNP Regulates the Expression of Classical and Nonclassical MHC Class I Proteins. [J Immunol. 196 \(12\): 4967-76.](#)
17. Bröker, P *et al.* (2012) A nanostructured SAW chip-based biosensor detecting cancer cells [Sensors and Actuators B: Chemical. 165 \(1\): 1-6.](#)
18. Reches, A. *et al.* (2020) A Unique Regulation Region in the 3' UTR of HLA-G with a Promising Potential. [Int J Mol Sci. 21 \(3\): 900.](#)

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

12 months from date of despatch

Health And Safety Information

Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2044>
10040

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

- Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
- Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)
- Goat Anti Mouse IgG (STAR76...) [RPE](#)

Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

North & South America	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-rad.com		Email: antibody_sales_uk@bio-rad.com		Email: antibody_sales_de@bio-rad.com

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