

Datasheet: MCA2044F

BATCH NUMBER 180302

Description:	MOUSE ANTI HUMAN HLA G:FITC
Specificity:	HLA G
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	MEM-G/9
Isotype:	IgG1
Quantity:	0.1 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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			

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.

Target Species	Human		
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
Preparation	Purified IgG prepared by affinity chromatography on Protein A		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide		
Stabilisers	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.1 mg/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_322626

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 10⁶ cells in 100ul.

References

1. Fournel, S. *et al.* (2000) Comparative reactivity of different HLA-G monoclonal antibodies to soluble HLA-G molecules. [Tissue Antigens. 55 \(6\): 510-8.](#)
2. Menier, C. *et al.* (2003) Characterization of monoclonal antibodies recognizing HLA-G or HLA-E: new tools to analyze the expression of nonclassical HLA class I molecules. [Hum Immunol. 64 \(3\): 315-26.](#)
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.](#)
5. Hiby, S.E. *et al* (2010) Maternal activating KIRs protect against human reproductive failure mediated by fetal HLA-C2 [J Clin Invest. 120: 4102-10.](#)
6. Sher, G. *et al.* (2005) Influence of early ICSI-derived embryo sHLA-G expression on pregnancy and implantation rates: a prospective study. [Hum Reprod. 20: 1359-63.](#)
7. Sher, G. *et al.* (2005) Soluble human leukocyte antigen G expression in phase I culture media at 46 hours after fertilization predicts pregnancy and implantation from day 3 embryo transfer. [Fertil Steril. 83: 1410-3.](#)
8. Apps, R. *et al.* (2011) Ex vivo functional responses to HLA-G differ between blood and decidual NK cells. [Mol Hum Reprod. 17: 577-86.](#)
9. Manaster, I. *et al.* (2012) MiRNA-mediated control of HLA-G expression and function. [PLoS One. 7: e33395.](#)
10. Nückel, H. *et al.* (2005) HLA-G expression is associated with an unfavorable outcome and immunodeficiency in chronic lymphocytic leukemia. [Blood. 105: 1694-8.](#)

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) HNRNPR 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.](#)

Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee

12 months from date of despatch

Health And Safety Information

Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2044F>
10041

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

North & South America Tel: +1 800 265 7376
Fax: +1 919 878 3751
Email: antibody_sales_us@bio-rad.com

Worldwide Tel: +44 (0)1865 852 700
Fax: +44 (0)1865 852 739
Email: antibody_sales_uk@bio-rad.com

Europe Tel: +49 (0) 89 8090 95 21
Fax: +49 (0) 89 8090 95 50
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
'M366091:200529'

Printed on 23 Jan 2024

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)