

# Datasheet: MCA6238GA

Description:	MOUSE ANTI HUMAN IFN GAMMA
Specificity:	IFN GAMMA
Format:	Purified
<b>Product Type:</b>	Monoclonal Antibody
Clone:	8C4H9
Isotype:	lgG2b
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
ELISA				1.0 ug/ml

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.

Target Species	Human	
Product Form	Purified IgG - liquid	
Preparation	Purified IgG prepared by affinity chromatography on Protein G supernatant	from tissue culture
Buffer Solution	Phosphate buffered saline	
Preservative Stabilisers	0.09% Sodium Azide (NaN <sub>3</sub> )	
Carrier Free	Yes	
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml	
Immunogen	E. coli derived recombinant human full length IFN gamma (Glr	n24-Gln166)

#### External Database Links

**UniProt:** 

P01579 Related reagents

**Entrez Gene:** 

3458 IFNG Related reagents

#### **Fusion Partners**

Cell fusion between immunized BALB/c mouse spleen cells and mouse myeloma SP2/0

#### **Specificity**

Mouse anti Human IFN gamma antibody, clone 8C4H9, recognizes interferon gamma (IFN gamma) also known as immune interferon, a type II interferon. It is a cytokine which is mainly expressed by CD4+ Th1 T lymphocytes and natural killer cells. IFN gamma plays many roles within immunity, including the activation of macrophages, T helper lymphocytes, stimulating antigen presentation, inflammation and leukocyte trafficking (Pereiro *et al.* 2019).

After infection antigen presenting cells secrete IL-12, IL-18 and IL-1 beta which can promote IFN gamma synthesis (<u>Schoenborn & Wilson 2007</u>). IFN gamma can then elicit responses through interferon gamma receptor 1 and interferon gamma receptor 2. Activation of these receptors can then trigger immune responses through the JAK/STAT signaling pathway (Pereiro *et al.* 2019).

Under physiological conditions, IFN gamma is constitutively expressed through a tightly controlled mechanism. However, it has been shown to have some protumorigenic roles, by upregulating checkpoint inhibitor programmed cell-death ligand 1. Conversely though, there have been some positive associations between IFN gamma and patient survival in several cancer types. As such, the exact roles that IFN gamma plays in cancer may largely be dependent on tumor specific context and microenvironmental cues (<u>Castro et al.</u> 2018).

The purified Mouse anti Human IFN gamma antibody, clone 8C4H9 (MCA6238GA) can be used as a capture antibody in a sandwich ELISA with the biotinylated Mouse anti Human IFN gamma antibody, clone 18F11G6 (MCA6239B) as the detection antibody.

#### 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: <a href="https://www.bio-rad-antibodies.com/SDS/MCA6238GA">https://www.bio-rad-antibodies.com/SDS/MCA6238GA</a> 10040
Regulatory	For research purposes only

### Related Products

# **Recommended Secondary Antibodies**

Goat Anti Mouse IgG (STAR77...) HRP
Rabbit Anti Mouse IgG (STAR12...) RPE

Rabbit Anti Mouse IgG (STAR8...) <u>DyLight®800</u>

Goat Anti Mouse IgG (STAR76...) RPE

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

Goat Anti Mouse IgG IgA IgM (STAR87...) Alk. Phos., HRP

Rabbit Anti Mouse IgG (STAR13...) HRP
Goat Anti Mouse IgG (STAR70...) FITC
Rabbit Anti Mouse IgG (STAR9...) FITC

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550,

DyLight®650, DyLight®680, DyLight®800,

FITC, HRP

## **Recommended Negative Controls**

MOUSE IgG2b NEGATIVE CONTROL (MCA691)

### **ELISA Matched Pair - Detection Antibody**

MOUSE ANTI HUMAN IFN GAMMA:Biotin (MCA6239B)

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 Tel: +44 (0)1865 852 700
 Europe
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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M390649:210924'

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