

## Technical Data Sheet

Alexa Fluor® 700 Rat Anti-Mouse IFN- $\gamma$ 

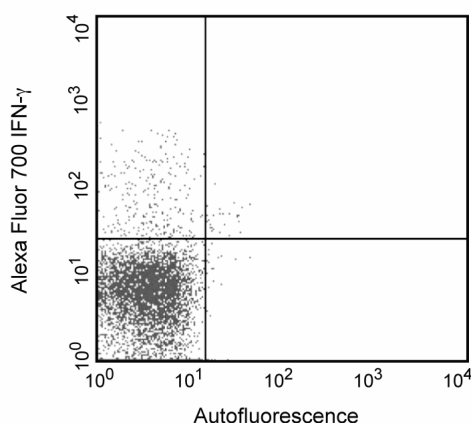
## Product Information

Material Number:	557998
Size:	0.1 mg
Concentration:	0.2 mg/ml
Clone:	XMG1.2
Immunogen:	Mouse IFN- $\gamma$
Isotype:	Rat IgG1, $\kappa$
Reactivity:	QC Testing: Mouse
Target MW:	15-17 kDa
Storage Buffer:	Aqueous buffered solution containing protein stabilizer and $\leq 0.09\%$ sodium azide.

## Description

The XMG1.2 antibody reacts with mouse interferon- $\gamma$  (IFN- $\gamma$ ) protein. IFN- $\gamma$  is a pleiotropic cytokine, of approximately 15-17 kDa, involved in the regulation of the immune response. It plays an important role in activation, growth, and differentiation of T and B lymphocytes, macrophages, NK cells and other non-hematopoietic cell types. IFN- $\gamma$  production is associated with the Th-1 differentiation. The immunogen was recombinant mouse IFN- $\gamma$ . This is a neutralizing antibody.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



**IFN- $\gamma$  expression in stimulated BALB/c spleen cells.**  
Splenocytes from BALB/c mice were stimulated for 4 hours with PMA (5 ng/ml, Sigma Cat. No. P-8139) and Ionomycin (500 ng, Sigma Cat. No. I-0634) in the presence of Brefeldin-A (GolgiPlug, Cat. No. 555029). Cells were harvested, fixed, permeabilized and stained with either rat anti-mouse IFN- $\gamma$  antibody (Alexa Fluor® 700 XMG1.2, Cat. No. 557998), or immunoglobulin isotype control (Alexa Fluor® 700 R3-34, Cat. No. 558001) by using the BD Biosciences Pharmingen staining protocol.

## Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated to Alexa Fluor® 700 under optimum conditions, and unreacted Alexa Fluor® 700 was removed.

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

## Application Notes

## Application

Intracellular staining (flow cytometry)	Routinely Tested
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## Recommended Assay Procedure:

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**Immunofluorescent Staining and Flow Cytometric Analysis:** XMG1.2 is useful for immunofluorescent staining and flow cytometric analysis on fixed and permeabilized cells to identify and enumerate IFN- $\gamma$  producing cells within mixed cell populations. An appropriate rat IgG1 isotype

## BD Biosciences

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control is BD Cat. No. 558001. For specific methodology, please visit the protocols section or chapter on intracellular staining in the Immune Function Handbook, both of which are posted on our web site, [www.bdbiosciences.com](http://www.bdbiosciences.com).

### Suggested Companion Products

<u>Catalog Number</u>	<u>Name</u>	<u>Size</u>	<u>Clone</u>
558001	Alexa Fluor® 700 Rat IgG1 $\kappa$ Isotype Control	0.1 mg	R3-34
555029	Protein Transport Inhibitor (Containing Brefeldin A)	1.0 ml	(none)
554715	BD Cytotfix/Cytoperm Plus Kit (with BD GolgiStop)	250 tests	(none)

### Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to [www.bdbiosciences.com/pharming/en/protocols](http://www.bdbiosciences.com/pharming/en/protocols) for technical protocols.
3. Alexa Fluor® 700 has an adsorption maximum of ~700nm and a peak fluorescence emission of ~720nm. Before staining cells with this reagent, please confirm that your flow cytometer is capable of exciting the fluorochrome and discriminating the resulting fluorescence.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at [www.bdbiosciences.com/colors](http://www.bdbiosciences.com/colors).
5. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
6. The Alexa Fluor®, Pacific Blue™, and Cascade Blue® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, excluding use in combination with microarrays, or as analyte specific reagents. The Alexa Fluor® dyes (except for Alexa Fluor® 430), Pacific Blue™ dye, and Cascade Blue® dye are covered by pending and issued patents.
7. Alexa Fluor is a registered trademark of Molecular Probes, Inc., Eugene, OR.

### References

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