For Research Use Only

## CoraLite® Plus 647 Anti-Mouse IFN gamma (XMG1.2)



Catalog Number: CL647-65153

Basic Information Catalog Number:

CL647-65153

Size:

100ug, 500 µg/ml Source:

Isotype: IgG1, kappa GenBank Accession Number:

BC119063 GenelD (NCBI): 15978

Full Name: interferon gamma Calculated MW:

17 kDa

Purification Method: Affinity purification

CloneNo.: XMG1.2

Excitation/Emission maxima

wavelengths: 654 nm / 674 nm

**Applications** 

**Tested Applications:** 

FC (Intra)

Species Specificity:

Mouse

## **Background Information**

Interferon gamma (IFN  $\gamma$ ), is a type II interferon that provides immunity against bacterial, viral and protozoan infections. In its active form, IFN  $\gamma$  is a glycosylated, non-covalently linked homodimer of 29-32 kDa subunits. It is produced by a number of immune cell types including natural killer cells, natural killer T cells, and effector lymphocyte T cells following antigenic and inflammatory triggers. The IFN  $\gamma$  dimer binds to its cognate receptor which has two subunits: IFN- $\gamma$  R1 which is the ligand-binding chain (a chain) and IFN- $\gamma$  R2, the signal-transducing chain ( $\beta$  chain). Binding to the receptor activates the JAK/STAT pathway which in turn activates IFN  $\gamma$  responsive genes. While IFN  $\gamma$  can inhibit viral replication, it also works as an immune-modulator and immune-stimulator by increasing surface expression of class I MHC proteins. (PMID: 19268625; 10688427)

Storage

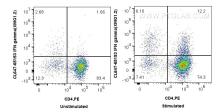
Storage:

Store at 2-8°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

PBS with 0.1% sodium azide and 0.5% BSA, pH 7.3.

## Selected Validation Data



1x10^6 PMA and ionomycin Stimulate C57BL/6 Th1-polarized splenocytes were intracellularly stained with 0.13 ug Coralite® Plus 647 Anti-Mouse IFN gamma (CL647-65153, Clone:XMG1.2), and 0.13 ug Coralite® Plus 647 Rat IgG1 Isotype Control (HRPN) (CL647-65212, Clone: HRPN), and 0.13 ug PE Anti-Mouse CD4 (GK1.5) (PE-65104, Clone: GK1.5). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).