10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-IFN gamma-AcalephFluor647-labled

Catalog # AP100456

Product Information

Application	FC, IF/IC
Primary Accession	P01580
Reactivity	Mouse
Clonality	Monoclonal
Calculated MW	17907

Additional Information

Gene ID	15978
Other Names	Interferon gamma; IFN-gamma; Immune interferon
Target/Specificity	Recognizes mouse IFN gamma
Dilution	FC~~1:10~50 IF/IC~~N/A
Format	Rat IgG1. Liquid in PBS, pH 7.3, 0.2% BSA, and 0.02% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	Ifng
Function	Type II interferon produced by immune cells such as T-cells and NK cells that plays crucial roles in antimicrobial, antiviral, and antitumor responses by activating effector immune cells and enhancing antigen presentation (PubMed:11585387, PubMed:8456301). Primarily signals through the JAK-STAT pathway after interaction with its receptor IFNGR1 to affect gene regulation. Upon IFNG binding, IFNGR1 intracellular domain opens out to allow association of downstream signaling components JAK2, JAK1 and STAT1, leading to STAT1 activation, nuclear translocation and transcription of IFNG-regulated genes. Many of the induced genes are transcription factors such as IRF1 that are able to further drive regulation of a next wave of transcription. Plays a role in class I antigen presentation pathway by inducing a replacement of catalytic proteasome subunits with immunoproteasome subunits. In turn, increases the quantity, quality, and repertoire of peptides for class I MHC loading. Increases the efficiency of peptide generation also by inducing the expression of activator PA28 that associates with the proteasome and alters its proteolytic cleavage preference. Up-regulates as well MHC II complexes on the cell surface by promoting expression of several key molecules such as cathepsins B/CTSB, H/CTSH, and L/CTSL (By similarity). Participates in the regulation of hematopoietic stem cells during development

	and under homeostatic conditions by affecting their development, quiescence, and differentiation (PubMed:20535209, PubMed:25078851).
Cellular Location	Secreted {ECO:0000250|UniProtKB:P01579}.
Tissue Location	Released primarily from activated T lymphocytes.

Background

AcalephFluor647-labled rat monoclonal antibody to IFN gamma

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.