For Research Use Only

CoraLite® Plus 488-conjugated STAT2 Monoclonal antibody



Catalog Number: CL488-66485

Basic Information

Catalog Number:

CL488-66485

1000 µg/ml

Source: Mouse Isotype:

lgG1

Immunogen Catalog Number:

AG10168

GenBank Accession Number:

BC051284

GeneID (NCBI):

UNIPROT ID: P52630

Full Name: signal transducer and activator of

transcription 2, 113kDa

Calculated MW:

851 aa, 98 kDa Observed MW:

113 kDa

Purification Method:

Protein G purification

CloneNo.: 1G12C4

Excitation/Emission maxima

wavelengths: 493 nm / 522 nm

Applications

Tested Applications:

FC (Intra)

Species Specificity:

Human, mouse, rat

Background Information

STAT2, also named as p113, belongs to the transcription factor STAT family. It is a signal transducer and activator of transcription that mediates signaling by type I IFNs (IFN-alpha and IFN-beta). Following type I IFN binding to cell surface receptors, Jak kinases (TYK2 and JAK1) are activated, leading to tyrosine phosphorylation of STAT1 and STAT2. The phosphorylated STATs dimerize and associate with ISGF3G/IRF-9 to form a complex termed ISGF3 transcription factor, that enters the nucleus. ISGF3 binds to the IFN stimulated response element (ISRE) to activate the transcription of IF stimulated genes, which drive the cell in an antiviral state. It also interacts with CRSP2, ${\it CRSP6, Simian virus 5 protein V, rabies virus phosphoprotein, IFNAR1 and IFNAR2. Its interaction with dengue virus}$ NS5 inhibits the phosphorylation of STAT2, and, when all viral proteins are present (polyprotein), STAT2 is targeted for degradation. The calculated molecular weight of STAT2 is 98 kDa, but phosphorylated STAT2 is about 100-113

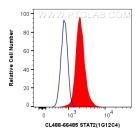
Storage

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



1X10^6 Ramos cells were intracellularly stained with 0.4 ug Coralite® Plus 488 Anti-Human STAT2 (CL488-66485, Clone:1G12C4) (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).