For Research Use Only

CoraLite®594-conjugated STAT2 Monoclonal antibody



Catalog Number: CL594-66485

Basic Information

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Source:

lgG1

BC051284 GeneID (NCBI): Size: 1000 µg/ml

Mouse P52630 Full Name: Isotype:

Immunogen Catalog Number:

AG10168

Calculated MW:

851 aa, 98 kDa Observed MW: 113 kDa

UNIPROT ID:

GenBank Accession Number:

signal transducer and activator of

transcription 2, 113kDa

Purification Method:

Protein G purification

CloneNo.: 1G12C4

Recommended Dilutions: IF/ICC 1:200-1:800

Excitation/Emission maxima

wavelengths: 588 nm / 604 nm

Applications

Tested Applications:

Species Specificity: Human, mouse, rat

Positive Controls:

IF/ICC: Ramos cells,

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

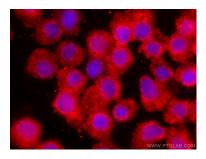
Storage

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

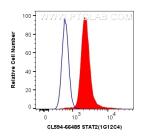
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed Ramos cells using CoraLite®594 STAT2 antibody (CL594-66485, Clone: 1G12C4) at dilution of 1:400.



1X10^6 Ramos cells were intracellularly stained with 0.4 ug Coralite®594 Anti-Human STAT2 (CL594-66485, Clone:1G12C4) (red), or 0.4 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).