For Research Use Only

CoraLite® Plus 647-conjugated STAT3 Monoclonal antibody



Catalog Number: CL647-60199

Featured Product

Basic Information

Catalog Number: CL647-60199 Concentration:

1000 μg/ml Source: Mouse Isotype: IgG2a

Immunogen Catalog Number:

AG0360

GenBank Accession Number:

BC000627 GeneID (NCBI): 6774 **UNIPROT ID:** P40763

Full Name: signal transducer and activator of

factor)

Calculated MW: 770 aa, 88 kDa Observed MW: 88 kDa

Purification Method:

Protein A purification

CloneNo.: 3G2D12

Recommended Dilutions:

IF/ICC: 1:50-1:500 FC (Intra): 0.40 ug per 10^6 cells in a

100 µl suspension

 $transcription \ 3 \ (acute-phase \ response \ Excitation/Emission \ maxima$

wavelengths: 654 nm / 674 nm

Applications

Tested Applications: IF/ICC, FC (Intra) Species Specificity:

human, mouse, rat

Positive Controls:

IF/ICC: HepG2 cells,

FC (Intra): HepG2 cells, HeLa cells

Background Information

Signal transducer and activator of transcription 3 (acute-phase response factor) (STAT3, synonyms: APRF, FLJ 20882, MGC 16063) is a member of the STAT protein family. In response to cytokines and growth factors, STAT family members are phosphorylated by the receptor associated kinases, and then form homo- or heterodimers that translocate to the cell nucleus where they act as transcription activators. STAT3 is activated through phosphorylation in response to various cytokines and growth factors including IFNs, EGF, IL5, IL6, HGF, LIF and BMP2. STAT3 mediates the expression of a variety of genes in response to cell stimuli, and thus plays a key role in many cellular processes such as cell growth and apoptosis. The small GTPase Rac1 has been shown to bind and regulate the activity of STAT3. This antibody is a mouse monoclonal antibody raised against residues near the N terminus of human STAT3. STAT3 exists three isoforms and the molecular weight of each isoform respectively is 83 kDa, 87 kDa and 88 kDa.

Storage

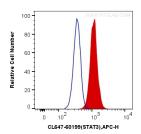
Storage:

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

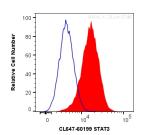
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

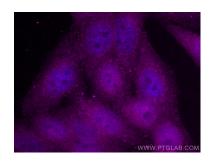
Selected Validation Data



1X10^6 HepG2 cells were intracellularly stained with 0.4 ug CoraLite® Plus 647 Anti-Human STAT3 (CL647-60199, Clone:3G2D12) (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



1X10^6 HeLa cells were intracellularly stained with 0.2 ug CoraLite® Plus 647 Anti-Human STAT3 (CL647-60199, Clone:3G2D12) (red), or 0.2 ug Control Antibody (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using Coralite® Plus 647 STAT3 antibody (CL647-60199, Clone: 3G2D12) at dilution of 1:200.