For Research Use Only

Phospho-STAT3 (Ser727) Monoclonal antibody

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Catalog Number: 60479-1-Ig

Basic Information

Catalog Number: GenBank Accession Number:

60479-1-lg BC000627 Protein A purification

GeneID (NCBI): CloneNo.: 100ul, Concentration: 1000 ug/ml by 6774 2G11G11

Nanodrop: **UNIPROT ID:** Recommended Dilutions: Source: P40763 WB 1:5000-1:50000 Mouse IF/ICC 1:500-1:2000 Full Name:

Isotype: signal transducer and activator of transcription 3 (acute-phase response IgG2a

factor)

Calculated MW: 770 aa, 88 kDa Observed MW: 85-90 kDa

Applications

Tested Applications:

WB, IF/ICC, FC (Intra), ELISA

Species Specificity: human, mouse, rat

Positive Controls:

WB: HeLa cells, A549 cells, UV treated HSC-T6 cells, MCF-7 cells, NIH/3T3 cells, EGF treated A549 cells, UV treated HeLa cells, TNF alpha treated MCF-7 cells

Purification Method:

IF/ICC : UV(1hour),100 nM Calyculin A(30 minutes)treated HeLa 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.

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

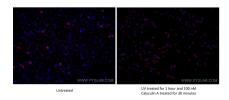
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

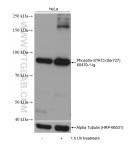
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

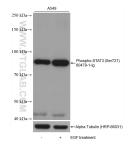
Selected Validation Data



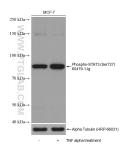
Immunofluorescent analysis of (4% PFA) fixed untreated HeLa cells, UV (1 hour) and 100 nM Calyculin A (30 minutes) treated HeLa cells using Phospho-STAT3 (Ser727) antibody (60479-1-1g, Clone: 2G11611) at dilution of 1:1000 and MultirAb Coralite® Plus 594-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM004).



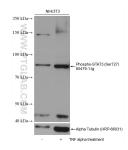
UV treated and untreated HeLa cells were subjected to SDS PAGE followed by western blot with 60479-1-Ig (Phospho-STAT3 (Ser727) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with HRP-conjugated Alpha Tubulin (HRP-66031) antibody as a loading control.



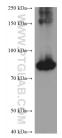
EGF treated and untreated A549 cells were subjected to SDS PAGE followed by western blot with 60479-1-Ig (Phospho-STAT3 (Ser727) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with HRP-conjugated Alpha Tubulin (HRP-66031) antibody as a loading control.



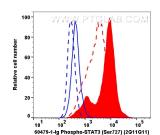
TNF alpha (HZ-1014) treated and untreated MCF-7 cells were subjected to SDS PAGE followed by western blot with 60479-1-1g (Phospho-STAT3 (Ser727) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with HRP-conjugated Alpha Tubulin (HRP-66031) antibody as a loading control.



TNF alpha (HZ-1014) treated and untreated NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 60479-1-Ig (Phospho-STAT3 (Ser727) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with HRP-conjugated Alpha Tubulin (HRP-66031) antibody as a loading control.



UV treated HSC-T6 cells were subjected to SDS PAGE followed by western blot with 60479-1-1g (STAT3 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



1x10^6 untreated HeLa cells (dash lines), UV (1 hour) and 100 nM Calyculin A (30 minutes) treated HeLa cells (full lines) were intracellularly stained with 0.1 µg Phospho-STAT3 (Ser727) Monoclonal antibody (60479-1-Ig, Clone: 2G11G11, red) and Multi-rAb Coralite ® Plus 647-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (CatNO. RGAM005). Mouse IgG2a isotype control Mouse McAb (66360-2-Ig, Clone: 11A 182, blue) was paralled stained as

