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# Phospho-STAT3-S727 Rabbit mAb

**Catalog No.: AP1593** Recombinant

## Basic Information

**Observed MW**
91 kDa

**Calculated MW**
88 kDa/83 kDa

**Category**
Primary antibody

**Applications**
WB,IP,IF/ICC,IHC-P,ChIP,ELISA

**Cross-Reactivity**
Human, Mouse, Rat

**CloneNo number**
ARC75347

## Background

The protein encoded by this gene 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. This protein is activated through phosphorylation in response to various cytokines and growth factors including IFNs, EGF, IL5, IL6, HGF, LIF and BMP2. This protein 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 this protein. PIAS3 protein is a specific inhibitor of this protein. This gene also plays a role in regulating host response to viral and bacterial infections. Mutations in this gene are associated with infantile-onset multisystem autoimmune disease and hyper-immunoglobulin E syndrome.

## Recommended Dilutions

| | |
|---|---|
| **WB** | 1:8000 - 1:16000 |
| **IP** | 0.5μg-4μg antibody for 200μg-400μg extracts of whole cells |
| **IF/ICC** | 1:1000 - 1:5000 |
| **IHC-P** | 1:3000 - 1:12000 |
| **ChIP** | 3μg antibody for 10μg-15μg of Chromatin |
| **ELISA** | Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements. For high-ratio antibody dilutions (≥1:10000)，a sequential dilution method is strongly recommended to ensure measurement accuracy. |

## Immunogen Information

**Gene ID**
6774

**Swiss Prot**
P40763

**Immunogen**
Synthetic peptide. This information is considered to be commercially sensitive.

**Synonyms**
APRF; HIES; ADMIO; ADMIO1

## Product Information

**Source**
Rabbit

**Isotype**
IgG

**Purification**
Affinity purification

**Storage**
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS with 0.09% Sodium azide,0.05% BSA,50% glycerol,pH7.3.

## Contact


400-999-6126

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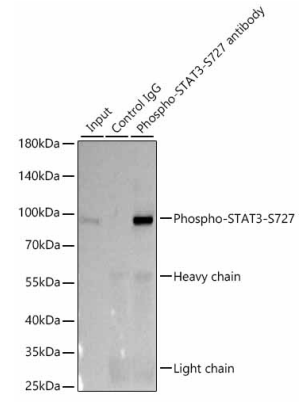
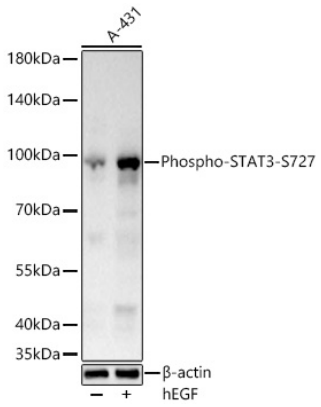
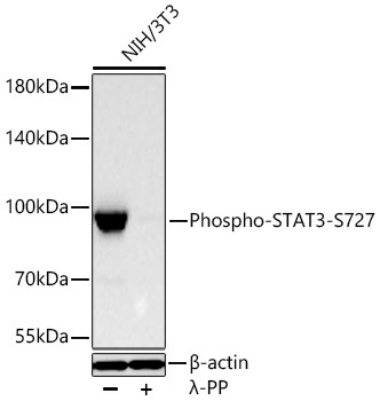
## Validation Data




Immunoprecipitation of Phospho-STAT3-S727 from 300 µg extracts of HeLa cells was performed using 1 µg of Phospho-STAT3-S727 Rabbit mAb (AP1593). Rabbit Control IgG (AC005) was used to precipitate the Control IgG sample. IP samples were eluted with 1x reducing Laemmli Buffer. The Input lane represents 10% of the total input. Western blot analysis of immunoprecipitates was conducted using Phospho-STAT3-S727 Rabbit mAb (AP1593) at a dilution of 1:20000.

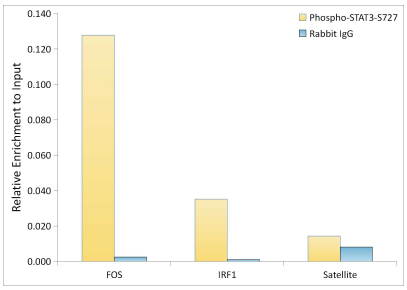



Western blot analysis of lysates from A-431 cells using Phospho-STAT3-S727 Rabbit mAb (AP1593) at 1:16000 dilution incubated overnight at 4℃. A-431 cells were treated with hEGF (100 ng/mL) at 37℃ for 30 minutes after serum-starvation overnight.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 30 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 90 s.

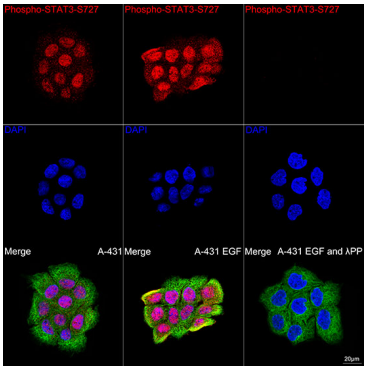



Western blot analysis of lysates from NIH/3T3 cells using Phospho-STAT3-S727 Rabbit mAb (AP1593) at 1:16000 dilution incubated overnight at 4℃. NIH/3T3 cells were treated with λ-PP mixed solution (2 U/µL) at 37℃ for 30 minutes.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 30 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 60 s.

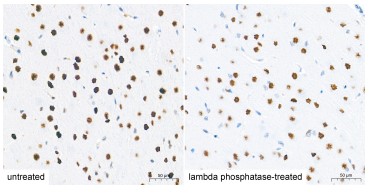
## Validation Data




Chromatin immunoprecipitation was performed with 15 µg of cross-linked chromatin from HeLa cells starved overnight and treaded with IFN-α(50ng/mL,15mins), using 3 µg of Phospho-STAT3-S727 Rabbit mAb (AP1593) and Rabbit IgG isotype control (AC042). The enrichment of immunoprecipitated DNA at different genomic loci was examined by quantitative PCR. The histogram compares the ratio of the immunoprecipitated DNA to the input at given loci.




Confocal imaging of A-431 cells(untreated), A-431 cells(treated with EGF) and A-431 cells(treated with EGF and λpp) using Phospho-STAT3-S727 Rabbit mAb (AP1593, dilution 1:5000) followed by a further incubation with Cy3-conjugated Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.




Immunohistochemistry analysis of paraffin-embedded Rat brain tissue, untreated (left) and lambda phosphatase-treated (right), using Phospho-STAT3-S727 Rabbit mAb (AP1593) at a dilution of 1:9000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.