

For Research Use Only

# Phospho-STAT1 (Tyr701) Recombinant antibody

Catalog Number: 82674-10-RR



## Basic Information

Catalog Number:

82674-10-RR

Concentration:

1000 ug/ml

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

BC002704

GeneID (NCBI):

6772

UNIPROT ID:

P42224

Full Name:

signal transducer and activator of transcription 1, 91kDa

Calculated MW:

83 kDa

Observed MW:

84-91 kDa

Purification Method:

Protein A purification

CloneNo.:

1C5

Recommended Dilutions:

WB: 1:2000-1:10000

FC (Intra): 0.13 ug per 10<sup>6</sup> cells in a 100 µl suspension

ChIP-qPCR: 1:10-1:100

## Applications

Tested Applications:

WB, FC (Intra), ELISA, ChIP-qPCR

Species Specificity:

human

Positive Controls:

WB: IFN gamma treated THP-1 cells,

FC (Intra): IFN gamma treated THP-1 cells,

ChIP-qPCR: IFN-γ (50 ng/ml, 30min) HT-1080 cells,

## Background Information

STAT1 (signal transducers and activators of transcription 1) is a member of the STAT protein family. 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. The phosphorylation of STAT1 at Tyr701 promotes the dimerization of STAT1 and its translocation into the nucleus where it binds the GAS promoter to allow the transcription of inflammatory response genes (PMID: 31408005). The transcript of STAT1 undergoes alternative splicing, resulting in two isoforms: STAT1<sup>α</sup> (91 kDa) and STAT1<sup>β</sup> (84 kDa) (PMID: 20159032).

## Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

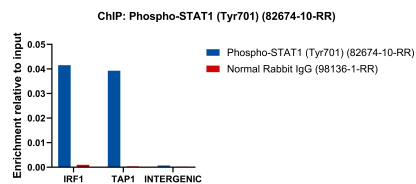
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

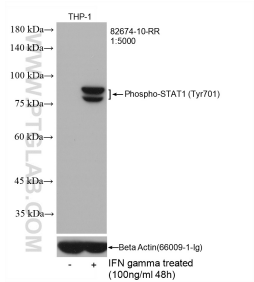
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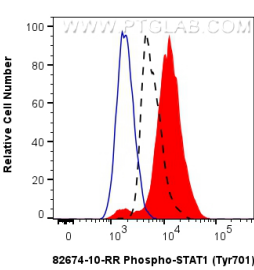
## Selected Validation Data



Chromatin was prepared from HT-1080 cells treated with IFN- $\gamma$  (50 ng/ml) for 30 min. Cells were fixed with formaldehyde for 10 minutes. The ChIP was performed with 20  $\mu$ g of cross-linked chromatin, 5  $\mu$ g of Phospho-STAT1 (Tyr701) (82674-10-RR) or 5  $\mu$ g of Normal Rabbit IgG (98136-1-RR), and 20  $\mu$ l of Protein A Magarose Beads. The immunoprecipitated DNA was quantified by real-time PCR.



Non-treated THP-1 cells and IFN gamma treated THP-1 cells were subjected to SDS PAGE followed by western blot with 82674-10-RR (Phospho-STAT1 (Tyr701) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with Beta Actin (66009-1-Ig) antibody as loading control.



1x10<sup>6</sup> THP-1 cells untreated (dashed lines) or treated with IFN gamma were intracellularly stained with 0.13  $\mu$ g Phospho-STAT1 (Tyr701) Recombinant antibody (82674-10-RR, Clone:1C5) and Coralite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.13  $\mu$ g Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.