For Research Use Only

# Phospho-STAT1 (Tyr701) Polyclonal antibody

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Catalog Number: 28979-1-AP

1 Publications

#### **Basic Information**

Catalog Number: 28979-1-AP Size: 500 ug/ml Source: Rabbit Isotype: GenBank Accession Number: BC002704

GeneID (NCBI): 6772 UNIPROT ID: P42224

signal transducer and activator of transcription 1, 91kDa

Calculated MW: 83 kDa Observed MW: 84-91 kDa

Full Name:

Purification Method: Antigen affinity purification Recommended Dilutions: WB 1:1000-1:6000

IF/ICC 1:200-1:800

# **Applications**

Tested Applications: WB, IF/ICC, FC (Intra), ELISA

Cited Applications:

WB

Species Specificity:

human Cited Species: human

#### Positive Controls:

WB:IFN gamma and LPS treated THP-1 cells, IF/ICC:IFN alpha treated HeLa 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 α (91 kDa) and STAT1 β (84 kDa)(PMID: 20159032).

#### **Notable Publications**

Ye Xie 37980535 J Transl Med WB	Author	Pubmed ID	Journal	Application
	Ye Xie	37980535	J Transl Med	WB

## Storage

Storage:

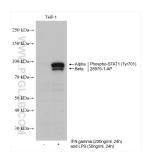
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

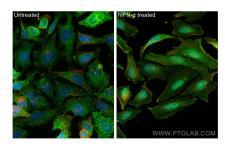
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

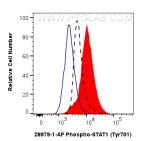
### **Selected Validation Data**



Non-treated THP-1 cells, IFN gamma and LPS treated THP-1 cells were subjected to SDS PAGE followed by western blot with 28979-1-AP (Phospho-STAT1 (Tyr701) antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed IFN alpha treated HeLa cells using Phospho-STAT1 (Tyr701) antibody (28979-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).



1x10^6 IFN gamma treated THP-1 cells were intracellularly stained with 0.25 ug Phospho-STAT1 (Tyr701) Polyclonal antibody (28979-1-AP) and Coralite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.