

For Research Use Only

STAT1 Recombinant antibody

Catalog Number: 82016-1-RR

Featured Product

1 Publications



Basic Information

Catalog Number:

82016-1-RR

Size:

100ul, Concentration: 1000 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG0199

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 kDa

Purification Method:

Protein A purification

CloneNo.:

2F16

Recommended Dilutions:

WB 1:5000-1:50000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:200-1:800

IF/ICC 1:500-1:2000

Applications

Tested Applications:

WB, IHC, IF/ICC, IP, ChIP, ELISA

Cited Applications:

WB

Species Specificity:

human, mouse, rat

Cited Species:

human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: HEK-293 cells, HeLa cells, A549 cells, Jurkat cells, K-562 cells, NIH/3T3 cells, HSC-T6 cells

IP: PC-3 cells,

IHC: human ovary tumor tissue, mouse spleen tissue, mouse colon tissue, rat colon tissue, rat spleen tissue

IF/ICC: IFN alpha treated HeLa cells,

ChIP: IFN-γ HT-1080 cells,

Background Information

STAT1 (signal transducers and activators of transcription 1) 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. Various ligands, including interferons- and -, EGF, PDGF and IL-6, can activate STAT1. STAT1 protein mediates the expression of a variety of genes, which is thought to be important for cell viability in response to different cell stimuli and pathogens.

Notable Publications

Author	Pubmed ID	Journal	Application
Hongjiao Wu	39611047	Noncoding RNA Res	WB

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

*** 20ul sizes contain 0.1% BSA

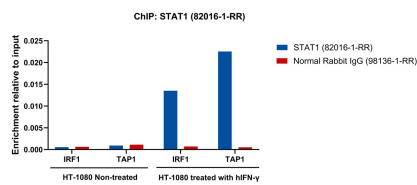
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

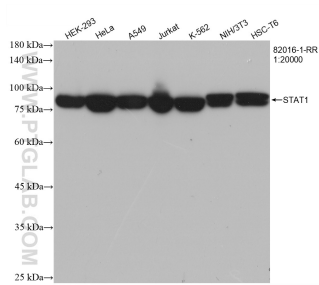
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

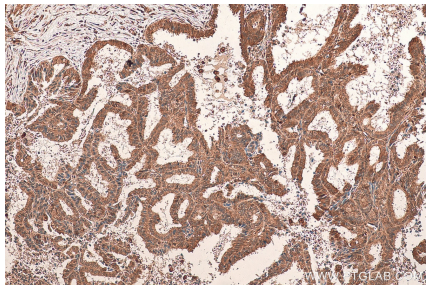
Selected Validation Data



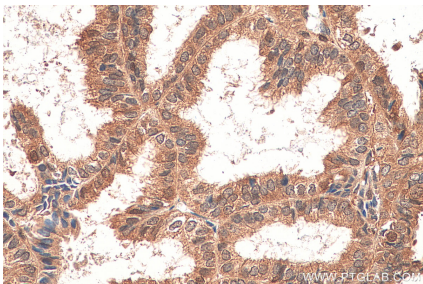
Chromatin was prepared from HT-1080 cells either non-treated or treated with hIFN-γ (50 ng/ml, 30min), and cells were fixed with formaldehyde for 10 minutes. The ChIP was performed with 15 µg of cross-linked chromatin, 5 µg of STAT1 (82016-1-RR) or 5 µg of Normal Rabbit IgG (98136-1-RR), and 20 µl of Protein A Magarose Beads. The immunoprecipitated DNA was quantified by real-time PCR.



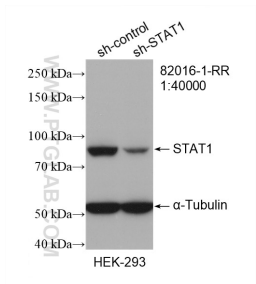
Various lysates were subjected to SDS PAGE followed by western blot with 82016-1-RR (STAT1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



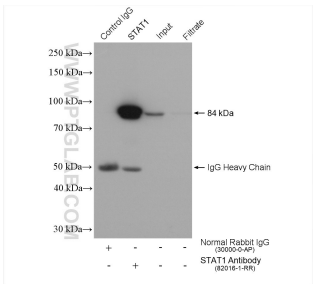
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 82016-1-RR (STAT1 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



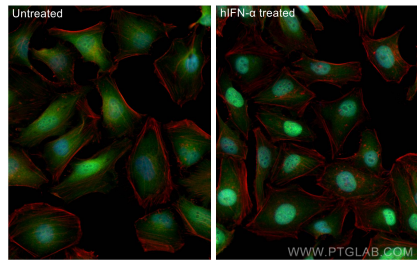
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 82016-1-RR (STAT1 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



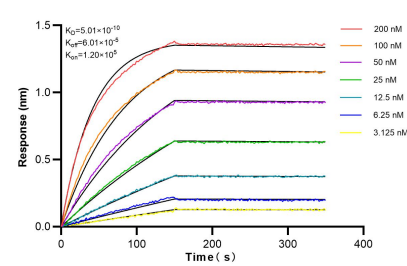
WB result of STAT1 antibody (82016-1-RR; 1:40000; incubated at room temperature for 1.5 hours) with sh-Control and sh-STAT1 transfected HEK-293 cells.



IP result of anti-STAT1 (IP:82016-1-RR, 4ug; Detection:82016-1-RR 1:10000) with PC-3 cells lysate 2000 ug.



Immunofluorescent analysis of (4% PFA) fixed IFN alpha treated HeLa cells using STAT1 antibody (82016-1-RR, Clone: 2F16) at dilution of 1:1000 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red).



Biolayer interferometry (BLI) kinetic assays of 82016-1-RR against Human STAT1 were performed. The affinity constant is 0.501 nM.