

## Phospho-STAT1 (Tyr701) Monoclonal Antibody (ST1P-11A5)

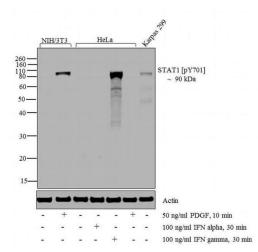
<b>Product Details</b>	
Size	50 μg
Species Reactivity	Human, Mouse
Published Species	Human, Mouse, Rhesus monkey
Host/Isotype	Mouse / IgG2a, kappa
Class	Monoclonal
Туре	Antibody
Clone	ST1P-11A5
Conjugate	Unconjugated
Immunogen	Synthetic phospho peptide encompassing the conserved C-terminal site (Y701) of murine STAT1 protein
Form	Liquid
Concentration	0.5 mg/mL
Purification	Protein A
Storage buffer	PBS, pH 7.4
Contains	0.1% sodium azide
Storage conditions	-20°C
RRID	AB_2533113

Applications	Tested Dilution	Publications
Western Blot (WB)	0.5-2 μg/mL	18 Publications
Immunohistochemistry (IHC)	-	2 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:10-1:100	-
Immunocytochemistry (ICC/IF)	-	2 Publications
ELISA (ELISA)	0.1-1.0 μg/mL	-
ChIP assay (ChIP)	5 μg	1 Publication
Miscellaneous PubMed (Misc)	-	2 Publications

#### **Product Specific Information**

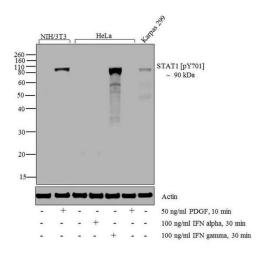
This antibody reacts specifically with the tyrosine-701 phosphorylated form of STAT1 and does not exhibit appreciable cross-reactivity with corresponding tyrosine phosphorylated forms of other STAT proteins or with other endogenous phosphotyrosine-containing proteins. To confirm the exclusive recognition of tyrosine phosphorylated STAT1, Western blots were carried out on lysates of 293 cells transfected with a STAT1 expression vector together with a wild type or kinase "dead" JAK1 expression vector. In addition, recognition of endogenous tyrosine phosphorylated STAT1 was confirmed on Western blots with cell lysates derived from serum starved or EGF-stimulated A431 cells and on Western blots with IFNa-stimulated mouse embryo fibroblast lysates.

## Product Images For Phospho-STAT1 (Tyr701) Monoclonal Antibody (ST1P-11A5)



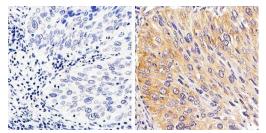
#### Phospho-STAT1 (Tyr701) Antibody (33-3400)

Altered expression of proteins upon cell treatment demonstrates antibody specificity. Western blot analysis of STAT1 (pT701) using STAT1 (pT701) Mouse Monoclonal Antibody (Product # 33-3400) shows induction of STAT1 (pT701) in NIH/3T3 cells treated with PDGF, and HeLa cells treated with IFN gamma. {TM}



## Phospho-STAT1 (Tyr701) Antibody (33-3400) in WB

Western blot analysis of STAT1 (pT701) was performed by loading 20 µg of NIH /3T3 (lane1), NIH/3T3 treated for 10 minutes with 50 ng/mL of PDGF (lane2), HeLa (lane3), HeLa treated for 30 minutes with 100 ng/mL of IFN alpha (lane4), HeLa treated for 30 minutes with 100 ng/mL of IFN gamma (lane5), HeLa treated for 10 minutes with 50 ng/mL of PDGF (lane6) and Karpas 299 (lane7) cell lysate using Novex®NuPAGE® 10 % Bis-Tris gel (Product # NP0302BOX), XCell SureLock Electrophoresis System (Product # El0002), Novex® Sharp Pre-Stained Protein Standard (LC5800), and iBlot® Dry Blotting System (IB21001). Proteins were transferred to a nitrocellulose membrane and blocked with 5% skim milk at 4°C overnight. STAT1 (pT701) was detected at ~ 90 kDa using STAT1 (pT701) Mouse Monoclonal Antibody (Product # 33-3400) at 0.5-1 µg/mL in 5% skim milk for 3 hour at room temperature on a rocking platform. Goat Anti-Mouse - HRP Secondary Antibody (Product # 62-6520) at 1:4000 dilution was used and chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate (Product # 32106).



#### Phospho-STAT1 (Tyr701) Antibody (33-3400) in IHC (P)

Immunohistochemistry analysis of Phospho-STAT1 (pTyr701) showing staining in the nucleus and cytoplasm of paraffin-embedded human cervical carcinoma tissue (right) compared to a negative control without primary antibody (left). To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H2O2-methanol for 15 min at room temperature, washed with ddH2O and PBS, and then probed with a Phospho-STAT1 pTyr701monoclonal antibody (Product # 33-3400) diluted in 3% BSA-PBS at a dilution of 1:20 overnight at 4°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.

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#### □ 25 References

### Western Blot (18)

Reproduction, fertility, and development

Signal transducer and activator of transcription (STAT) 1 and STAT3 are expressed in the human ovary and have Janus kinase 1-independent functions in the COV434 human granulosa cell line.

"33-3400 was used in Western Blotting to implicate a conserved role for JAK/STAT signalling in human ovary development, warranting further investigation of this pathway in human granulosa cell function."

Authors: Frost ER,Ford EA,Peters AE,Reed NL,McLaughlin EA,Baker MA,Lovell-Badge R,Sutherland JM

**Year** 2020

Species Human

Dilution 1:1000

#### **Nature communications**

## PBRM1 loss defines a nonimmunogenic tumor phenotype associated with checkpoint inhibitor resistance in renal carcinoma.

"33-3400 was used in Western Blotting to investigate if PBRM1/Pbrm1 deficiency can reduce the binding of brahmarelated gene 1 (BRG1) to the IFN receptor 2 (Ifngr2) promoter, thus decreasing STAT1 phosphorylation and the subsequent expression of IFN target genes."

Authors: Liu XD,Kong W,Peterson CB,McGrail DJ,Hoang A,Zhang X,Lam T,Pilie PG,Zhu H,Beckermann KE,Haake SM, Isqandrova S,Martinez-Moczygemba M,Sahni N,Tannir NM,Lin SY,Rathmell WK,Jonasch E

**Year** 2020

Species Human

View more WB references on thermofisher.com

## Immunohistochemistry (2)

#### Scientific reports

# TWEAK blockade decreases atherosclerotic lesion size and progression through suppression of STAT1 signaling in diabetic mice.

"33-3400 was used in Western Blotting to demonstrate that TWEAK blockade delay plaque progression and alter plaque composition in diabetic atherosclerotic mice."

Authors: Fernández-Laso V,Sastre C,Méndez-Barbero N,Egido J,Martín-Ventura JL,Gómez-Guerrero C,Blanco-Colio LM

**Year** 2017

Species Mouse

#### PLoS pathogens

## Functional genomics highlights differential induction of antiviral pathways in the lungs of SARS-CoV-infected macaques.

"33-3400 was used in immunocytochemistry and immunohistochemistry - paraffin section propose that induction of early IFN signaling may confer protection against severe acute respiratory syndrome coronavirus infection"

Authors: de Lang A,Baas T,Teal T,Leijten LM,Rain B,Osterhaus AD,Haagmans BL,Katze MG

**Year** 2007

Species Rhesus monkey

### More applications with references on thermofisher.com

## ICC/IF (2) ChIP (1) Misc (2)

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