

## Product datasheet for AP01689PU-M

## STAT1 pTyr701 Rabbit Polyclonal Antibody

**Product data:** 

Product Type: Primary Antibodies

Applications: ELISA, IHC, IP, WB

Recommended Dilution: Western blot: 1/500-1/1000.

Immunoprecipitation: 1/50-1/200.

**Immunohistochemistry on Paraffin Sections:** 1/50-1/200.

Reactivity: Human, Mouse, Rat

**Host:** Rabbit

Clonality: Polyclonal

**Specificity:** This antibody detects endogenous levels of STAT1 protein only when phosphorylated at

Tyr701.

**Formulation:** Phosphate buffered saline (PBS), pH~7.2

State: Aff - Purified

State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE).

Preservative: 0.05% Sodium Azide

**Concentration:** 1.0 mg/ml

**Purification:** Affinity Chromatography using epitope-specific immunogen.

**Conjugation:** Unconjugated

**Storage:** Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: One year from despatch.

**Predicted Protein Size:** ~ 87 kDa

**Gene Name:** signal transducer and activator of transcription 1

Database Link: Entrez Gene 6772 Human

P42224



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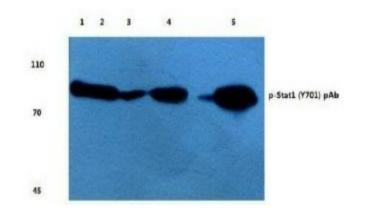
## Background:

Signal transducer and activator of transcription that mediates signaling by interferons (IFNs). Following type I IFN (IFN-alpha and IFN-beta) binding to cell surface receptors, Jak kinases (TYK2 and JAK1) are activated, leading to tyrosine phosphorylation of STAT1 and STAT2. The phosphorylated STATs dimerize, associate with ISGF3G/IRF-9 to form a complex termed ISGF3 transcription factor, that enters the nucleus. ISGF3 binds to the IFN stimulated response element (ISRE) to activate the transcription of interferon stimulated genes, which drive the cell in an antiviral state. In response to type II IFN (IFN-gamma), STAT1 is tyrosine- and serine-phosphorylated. It then forms a homodimer termed IFN-gamma-activated factor (GAF), migrates into the nucleus and binds to the IFN gamma activated sequence (GAS) to drive the expression of the target genes, inducing a cellular antiviral state.

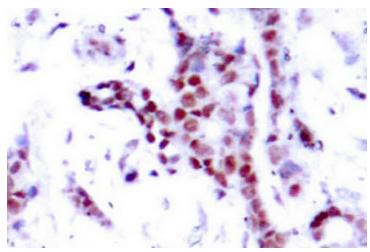
Synonyms:

DKFZp686B04100; ISGF-3; OTTHUMP00000205845; STAT91

## **Product images:**



Western blot analysis ofp-STAT1 (Tyr701) at 1/500:<u>Lane 1:</u>A549 whole cell lysate treated IFN-a.<u>Lane 2</u>: DLDwhole cell lysate treated IFN-a.<u>Lane 3</u>: H9C2 whole cell lysate treated IFN-a. <u>Lane 4&



Immunohistochemistry (IHC) analyzes of p-Stat1 antibody (Cat.-No.: [AP01689PU-N]) in paraffinembedded human breast carcinoma tissue.