

## Product datasheet for **AP02445PU-N**

### STAT1 pSer727 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	<b>Western Blot:</b> 1/500-1/1000. <b>Immunofluorescence:</b> 1/100-1/200. <b>Immunohistochemistry on Paraffin-Embedded Sections:</b> 1/50-1/100.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	The antiserum was produced against synthesized phosphopeptide derived from human STAT1 around the phosphorylation site of serine 727 (P-M-Sp-P-E).
Specificity:	This antibody detects endogenous levels of STAT1 only when phosphorylated at Serine 727.
Formulation:	PBS (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150 mM NaCl, 0.02% Sodium Azide and 50% Glycerol. State: Aff - Purified State: Liquid purified Ig fraction.
Concentration:	lot specific
Purification:	Immunoaffinity Chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.
Conjugation:	Unconjugated
Storage:	Store the antibody (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: One year from despatch.
Gene Name:	signal transducer and activator of transcription 1
Database Link:	<a href="#">Entrez Gene 6772 Human P42224</a>



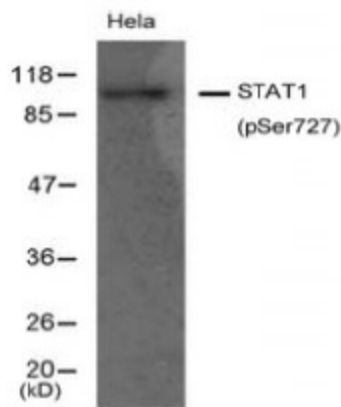
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**Background:**

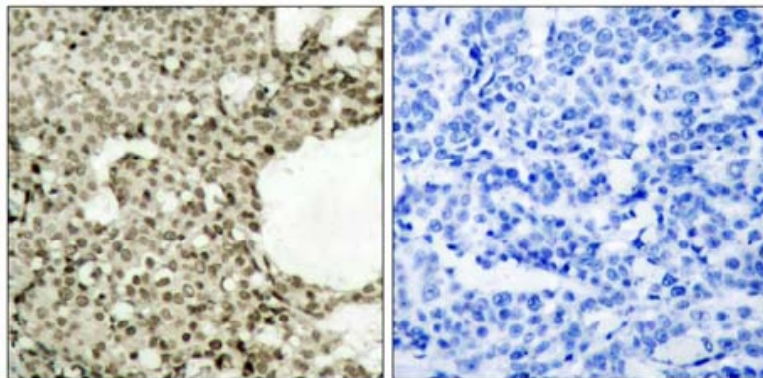
Signal transducer and activator of transcription that mediates signaling by interferons (IFNs). Following type I IFN (IFN- $\alpha$  and IFN- $\beta$ ) binding to cell surface receptors, Jak kinases (TYK2 and JAK1) are activated, leading to tyrosine phosphorylation of STAT1 and STAT2. The phosphorylated 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:**

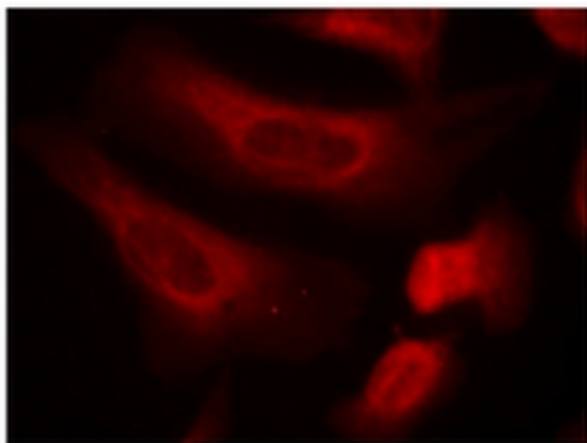
DKFZp686B04100; ISGF-3; OTTHUMP00000205845; STAT91

**Product images:**


Western Blot analysis of extracts from HeLa cells using STAT1 Antibody (phospho- Ser727) Cat.-No AP02445PU.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using STAT1 Antibody (phospho- Ser727) Cat.-No AP02445PU.



Immunofluorescence staining of methanol-fixed HeLa cells using STAT1 Antibody (phospho-Ser727) Cat.-No AP02445PU.