



# Stat1 (phospho Ser727) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-01375
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	STAT1
<b>Protein Name</b>	Signal transducer and activator of transcription 1-alpha/beta
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human STAT1 around the phosphorylation site of Ser727. AA range:694-743
<b>Specificity</b>	Phospho-Stat1 (S727) Polyclonal Antibody detects endogenous levels of Stat1 protein only when phosphorylated at S727.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/10000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	STAT1; Signal transducer and activator of transcription 1-alpha/beta; Transcription factor ISGF-3 components p91/p84
<b>Observed Band</b>	87kD
<b>Cell Pathway</b>	Cytoplasm . Nucleus . Translocated into the nucleus upon tyrosine phosphorylation and dimerization, in response to IFN-gamma and signaling by activated FGFR1, FGFR2, FGFR3 or FGFR4 (PubMed:15322115). Monomethylation at Lys-525 is required for phosphorylation at Tyr-701 and translocation into the nucleus (PubMed:28753426). Translocates into the nucleus in response to interferon-beta stimulation (PubMed:26479788). .
<b>Tissue Specificity</b>	B-cell,Brain,Retina,Testis,
<b>Function</b>	disease:Defects in STAT1 are a cause of mendelian susceptibility to mycobacterial disease (MSMD) [MIM:209950]; also known as familial disseminated atypical mycobacterial infection. This rare condition confers predisposition to illness caused by moderately virulent mycobacterial species, such as Bacillus Calmette-Guerin (BCG) vaccine and environmental non-tuberculous mycobacteria, and by the more virulent Mycobacterium tuberculosis. Other microorganisms rarely cause severe clinical disease in individuals with susceptibility to mycobacterial infections, with the exception of Salmonella which infects less than 50% of these individuals. The pathogenic mechanism underlying MSMD is the impairment of interferon-gamma mediated



immunity whose severity determines the clinical outcome. Some patients die of overwhelming mycobacterial disease with lepromatous-like lesions in early childhood, whereas

**Background**

The protein encoded by this gene 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. This protein can be activated by various ligands including interferon-alpha, interferon-gamma, EGF, PDGF and IL6. This 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. Two alternatively spliced transcript variants encoding distinct isoforms have been described. [provided by RefSeq, Jul 2008],

**matters needing attention**

Avoid repeated freezing and thawing!

**Usage suggestions**

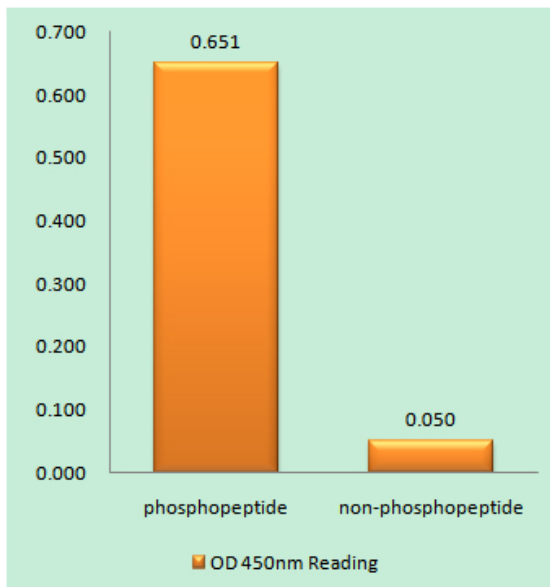
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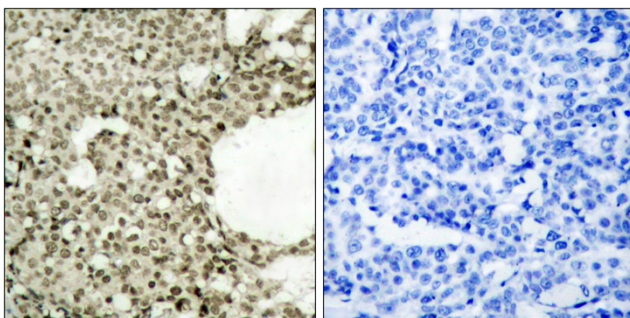
## Products Images



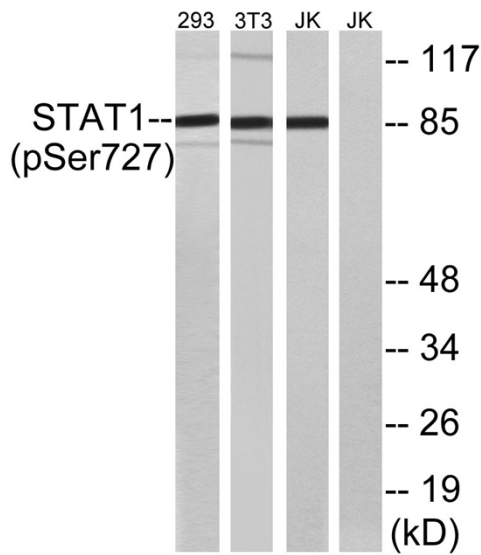
Western Blot analysis of K562 293 PC-3 HepG2-UV cells using Phospho-Stat1 (S727) Polyclonal Antibody diluted at 1:1000



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using STAT1 (Phospho-Ser727) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using STAT1 (Phospho-Ser727) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from 293 cells, 3T3 cells treated with UV (15mins) and Jurkat cells treated with eto (25uM, 24hours), using STAT1 (Phospho-Ser727) Antibody. The lane on the right is blocked with the phospho peptide.