



# Stat2 (phospho Tyr690) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-01345
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	STAT2
<b>Protein Name</b>	Signal transducer and activator of transcription 2
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human STAT2 around the phosphorylation site of Tyr690. AA range:656-705
<b>Specificity</b>	Phospho-Stat2 (Y690) Polyclonal Antibody detects endogenous levels of Stat2 protein only when phosphorylated at Y690.
<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: 1/20000.. 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>	STAT2; Signal transducer and activator of transcription 2; p113
<b>Observed Band</b>	113kD
<b>Cell Pathway</b>	Cytoplasm . Nucleus . Translocated into the nucleus upon activation by IFN-alpha/beta. .
<b>Tissue Specificity</b>	Human small intestine,Lung,
<b>Function</b>	function:Signal transducer and activator of transcription that mediates signaling by type I IFNs (IFN-alpha and IFN-beta). Following type I IFN 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.,PTM:Tyrosine phosphorylated in response to IFN-alpha.,similarity:Belongs to the transcription factor STAT family.,similarity:Contains 1 SH2 domain.,subcellular location:Translocated into the nucleus upon activation by IFN-alpha/beta.,subunit:Interacts with ISGF3G/IRF-9 in the cytoplasm. Heterodimer with STAT1 upon I
<b>Background</b>	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. In response to interferon (IFN), this protein forms a complex with STAT1 and IFN regulatory factor family protein p48 (ISGF3G), in which this protein acts as a transactivator, but lacks the ability to bind DNA directly. Transcription adaptor P300/CBP (EP300/CREBBP) has been shown to interact specifically with this protein, which is thought to be involved in the process of blocking IFN-alpha response by adenovirus. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2010],

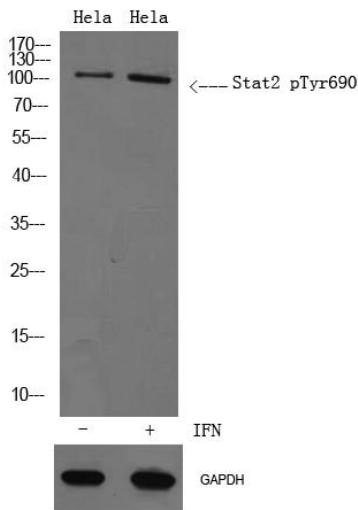
**matters needing attention**

Avoid repeated freezing and thawing!

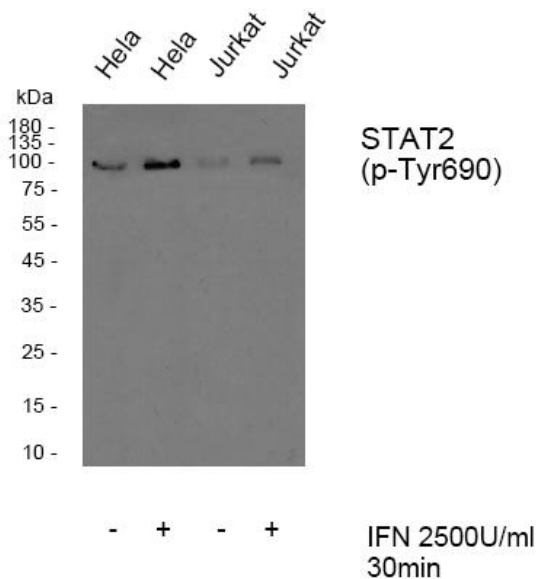
**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

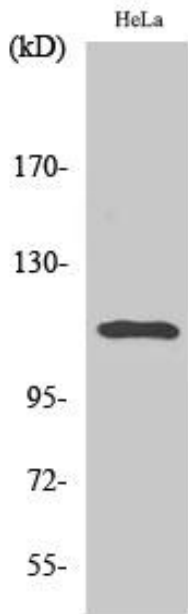
**Products Images**



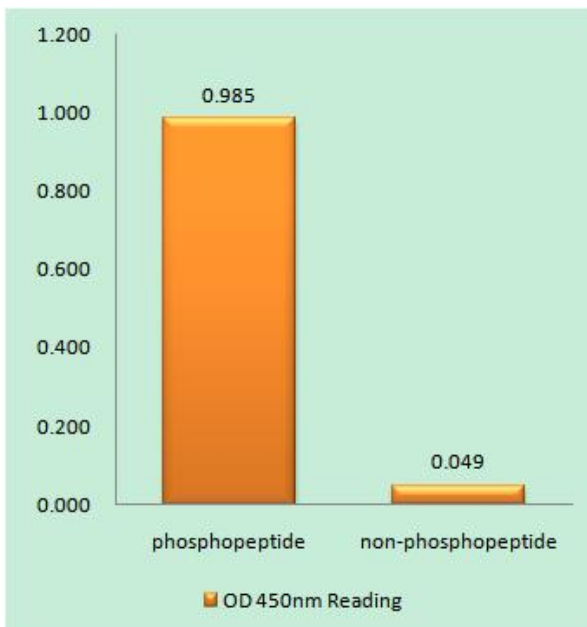
Western blot analysis of lysates from HeLa cells treated with IFN 2500U/ml 30' , using Stat2 p-Thr690 Antibody. Primary Antibody was diluted at 1:1000 4° over night,secondary antibody(Immunoway cat:RS0002)was diluted at 1:10000, 37° 1hour.



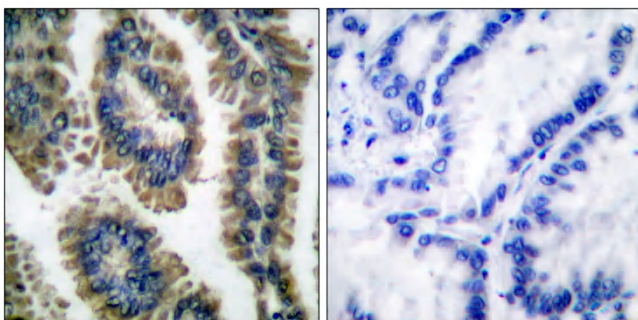
Western blot analysis of Stat2 (phospho Tyr690) Polyclonal Antibody, using HeLa,Jurkat cell treated or untreated with IFN 2500U/ml 30', 4° over night, secondary antibody(cat: RS0002 was diluted at 1:10000, 37° 1hour.



Western Blot analysis of various cells using Phospho-Stat2 (Y690) Polyclonal Antibody



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using STAT2 (Phospho-Tyr690) Antibody



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma, using STAT2 (Phospho-Tyr690) Antibody. The picture on the right is blocked with the phospho peptide.