## **Product Datasheet**

## Human Signal transducer and activator of transcription 1 (STAT1) ELISA Kit

Catalog No: #EK6671

Package Size: #EK6671-1 48T #EK6671-2 96T



Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

Description	
Product Name	Human Signal transducer and activator of transcription 1 (STAT1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	DKFZp686B04100; ISGF-3; STAT91; OTTHUMP00000205845 signal transducer and activator of transcription
	1 signal transducer and activator of transcription-1 transcription factor ISGF-3 components p91/p8
Accession No.	P42224
Uniprot	P42224
GeneID	6772;
Storage	The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5%
	within the expiration date under appropriate storage condition.
	The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days,
	and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China
	Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage
	at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).

## **Application Details**

Detect Range:0.156-10 ng/mL	
Sensitivity:0.059 ng/mL	
Sample Type:Serum, Plasma, Other biological fluids	
Sample Volume: 1-200 µL	
Assay Time:1-4.5h	
Detection wavelength:450 nm	

## **Product Description**

Detection Method:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate STAT1 in samples. An antibody specific for STAT1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anySTAT1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for STAT1 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of STAT1 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:STAT1 is a member of the Signal Transducers and Activators of Transcription family of transcription factors. STAT1 is involved in upregulating genes due to a signal by either type I or type II interferons.

In response to IFN-gamma; stimulation, STAT1 forms homodimers or heterodimers with STAT3 that bind to the GAS (Interferon-Gamma Activated Sequence) promoter element; in response to either IFN- $\alpha$  or IFN- $\beta$  stimulation, STAT1 forms a heterodimer with STAT2 that can bind the ISRE (Interferon Stimulated Response Element) promoter element. In either case, binding of the promoter element leads to an increased expression of ISG (Interferon Stimulated Genes).Expression of STAT1 can be induced with diallyl disulfide, a compound in garlic.

Note: This product is for in vitro research use only