# **Elabscience**®

## **Recombinant Human STAT1 Protein**

### Catalog Number: PKSH033321

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Human
Source	E.coli-derived Human STAT1 protein Met 1-Val712
Calculated MW	83.3 kDa
Observed MW	85 kDa
Accession	P42224
<b>Bio-activity</b>	Not validated for activity
Properties	
Purity	> 68 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of
	reconstituted samples are stable at $< -20^{\circ}$ C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 $\mu$ m filtered solution of 20mM PB, 0.02% Tween 80, 5%
	Sucrose, 4% Mannitol, pH 7.4.
	Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants
	before lyophilization.
	Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

#### Data



> 68 % as determined by reducing SDS-PAGE.

#### Background

Signal Transducer and Activator of Transcription 1-Alpha/Beta (STAT1) contains one SH2 domain and belongs to the transcription factor STAT family. When tyrosine- and serine-phosphorylated; STAT1 can form a homodimer termed IFN-gamma-activated factor (GAF); migrate into the nucleus and bind to the IFN gamma activated sequence (GAS) to drive the expression of the target genes; inducing a cellular antiviral state. STAT1 functions as signal transducer and transcription activator that mediates cellular responses to interferons. Defects in STAT1 are the cause of STAT1 deficiency complete and familial candidiasis type 7.