



# Recombinant Protein Technical Manual

## Recombinant Human STAT1 Protein

RPES1886

### Product Data:

**Product SKU:** RPES1886

**Size:** 10µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** P42224-2

### Protein Information:

**Molecular Mass:** 83.3 kDa

**AP Molecular Mass:** 85 kDa

**Tag:**

**Bio-activity:**

**Purity:** > 90 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** 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°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 µm filtered solution of 20mM PB,150mM NaCl,pH7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Signal Transducer and Activator of Transcription 1-Alpha/Beta; Transcription Factor ISGF-3 Components p91/p84; STAT1; CANDF7;IMD31A;IMD31B;IMD31C;ISGF-3;STAT91

## Immunogen Information:

**Sequence:** Met 1-Val712

## 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.