



# Recombinant Protein Technical Manual

## Recombinant Human STAT6 Protein (Baculovirus, His Tag)

RPES0890

### Product Data:

**Product SKU:** RPES0890

**Size:** 100µg

**Species:** Human

**Expression host:** Baculovirus-Insect Cells

**Uniprot:** P42226

### Protein Information:

**Molecular Mass:** 95.5 kDa

**AP Molecular Mass:** 100 kDa

**Tag:** C-His

**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 sterile 20mM Tris, 500mM NaCl, pH 7.4, 20% gly, 0.3mM DTT

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

**Application:**

**Synonyms:** Signal Transducer and Activator of Transcription 6; IL-4 Stat; STAT6;IL-4-STAT;STAT6B;STAT6C

## Immunogen Information:

**Sequence:** Met 1-Trp 847

## Background:

Signal transducer and activator of transcription 6 (STAT6) is a transcription factor that is activated by interleukin-4 (IL-4)-induced tyrosine phosphorylation and mediates most of the IL-4-induced gene expression. STAT6 plays a central role in exerting interleukin-4 (IL-4) mediated biological responses and is found to induce the expression of BCL2L1/BCL-XL, which is responsible for the anti-apoptotic activity of IL4. Transcriptional activation by STAT6 requires the interaction with coactivators like p300 and the CREB-binding protein (CBP). NF- $\kappa$ B and tyrosine-phosphorylated Stat6 can directly bind each other in vitro and in vivo, which suggest that the direct interaction between Stat6 and NF- $\kappa$ B may provide a basis for synergistic activation of transcription by IL-4 and activators of NF- $\kappa$ B.