

## Recombinant STAT3 protein

**Catalog No:** 81095, 81895

**Lot No:** 32217001

**Expressed In:** Baculovirus

**Quantity:** 20, 1000 µg

**Concentration:** 0.45 µg/µl

**Source:** Human

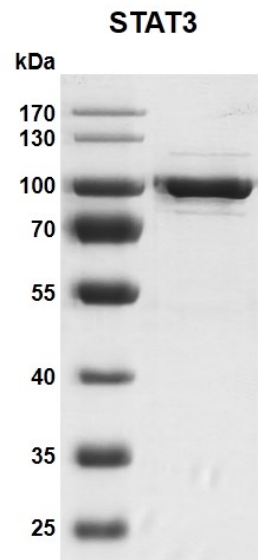
**Buffer Contents:** Recombinant STAT3 protein is supplied in 25 mM HEPES-NaOH pH 7.5, 300 mM NaCl, 10% glycerol, 0.04% Triton X-100 and 0.5 mM TCEP.

**Background:** STAT3 (Signal Transducer And Activator Of Transcription 3), also known as APRF (Acute-Phase Response Factor) or ADMIO, HIES, is a signal transducer and transcription activator that mediates cellular responses to interleukins, KITLG/SCF, LEP and other growth factors. Once activated, STAT3 can recruit coactivators, such as NCOA1 or MED1, to the promoter region of the target gene. Deacetylation and oxidation of lysine residues by LOXL3, leads to disrupt STAT3 dimerization and inhibit its transcription activity. STAT3 can bind to the interleukin-6 (IL-6)-responsive elements identified in the promoters of various acute-phase protein genes. It also acts as a regulator of inflammatory response by regulating differentiation of naive CD4(+) T-cells into T-helper Th17 or regulatory T-cells. It is involved in cell cycle regulation by inducing the expression of key genes for the progression from G1 to S phase, such as CCND1. Cytoplasmic STAT3 represses macroautophagy by inhibiting EIF2AK2/PKR activity.

**Protein Details:** Recombinant human STAT3 protein was expressed in a baculovirus expression system as the full length protein (accession number NP\_644805.1) with an N-terminal FLAG tag. The molecular weight of the protein is 89.2 kDa.

**Application Notes:** This protein is suitable for use in protein-protein interaction, *in vitro* transcription assay, binding assay.

**Storage and Guarantee:** Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.



**Recombinant STAT3 protein gel**  
10% SDS-PAGE Coomassie staining  
MW: 89.2 kDa  
Purity: >90%