



Recombinant Protein Technical Manual

Recombinant Human STAT5B Protein (His Tag)

RPE5029

Product Data:

Product SKU: RPE5029

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: P51692

Protein Information:

Molecular Mass: 38.4 kDa

AP Molecular Mass: 38 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

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

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

Formulation: Supplied as a 0.2 µm filtered solution of PBS, 50% Glycerol, 1mM DTT, pH 7.4.

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

Application:

Synonyms: Signal Transducer and Activator of Transcription 5B; STAT5B

Immunogen Information:

Sequence: Met 1-Thr321

Background:

Signal Transducer and Activator of Transcription 5b (STAT5B) is a member of the STAT family of transcription factors. They are responsible for an array of cellular activities including regulating growth, survival, differentiation, motility, and the immune response. STAT5B mediates the signal transduction triggered by various cell ligands, such as IL2, IL4, CSF1, and different growth hormones. It has been shown to be involved in diverse biological processes, such as TCR signaling, apoptosis, adult mammary gland development, and sexual dimorphism of liver gene expression. Signal transducer and activator of transcription 5 (STAT5) is a member of the Jak/STAT signal transduction pathway and is activated by a variety of cytokines (IL22, IL6). STAT5 has two isoforms (A and B) that share 93% amino acid identity and bind the DNA consensus site TTCN3GAA. STAT5 mediates cytokine signaling by acting as a signal transducer in the cytoplasm and, upon phosphorylation, translocates to the nucleus and activates transcription of specific genes. STAT5 is involved in a wide array of biological processes ranging from regulating apoptosis to adult mammary gland proliferation, differentiation and survival.