Recombinant Human STAT5B Protein (His Tag)

Catalog Number: PKSH033058



Note: Centrifuge before opening to ensure complete recovery of vial contents. Description **Species** Human Mol Mass 38.4 kDa Accession P51692 **Bio-activity** Not validated for activity **Properties** > 95 % as determined by reducing SDS-PAGE. Purity < 1.0 EU per µg of the protein as determined by the LAL method. Endotoxin Store at $< -20^{\circ}$ C, stable for 6 months. Please minimize freeze-thaw cycles. Storage Shipping This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at $< -20^{\circ}$ C. Formulation Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 10% Trehalose, 1mM DTT, 0.05% Tween 80, pH 8.5. Not Applicable Reconstitution

Data

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> 95 % as determined by reducing SDS-PAGE.

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, CSF 1, 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 transduction 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.

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