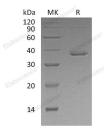
## **Recombinant Human STAT5B Protein (His Tag)**

#### Catalog No. PKSH033058

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Synonyms	Signal Transducer and Activator of Transcription 5B;STAT5B
Species	Human
Expression Host	E.coli
Sequence	Met 1-Thr321
Accession	P51692
Calculated Molecular Weight	38.4 kDa
Observed molecular weight	36 kDa
Tag	C-His
Bioactivity	Not validated for activity
Properties	
Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per $\mu$ g of the protein as determined by the LAL method.
Storage	Store at $< -20^{\circ}$ 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 $< -20^{\circ}$ C.
Formulation	Supplied as a 0.2 $\mu$ m filtered solution of 20mM Tris-HCl, 10% Trehalose, 1mM DTT, 0.05% Tween 80, pH 8.5.
Reconstitution	Not Applicable
Data	



> 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, 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 transduction and

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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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