Human STAT6 Protein (His Tag)

Catalog Number: **13190-H08B**

General Information

Gene Name Synonym:

D12S1644; IL-4-STAT; STAT6B; STAT6C

Protein Construction:

A DNA sequence encoding the human STAT6 isoform 1 (P42226-1) (Met 1-Trp 847) was fused with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: Baculovirus-Insect Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Ser 2

Molecular Mass:

The recombinant human STAT6 consists of 857 amino acids and predicts a molecular mass of 95.5 kDa. It migrates as an approximately 100 kDa band in SDS-PAGE in SDS-PAGE under reducing conditions.

Formulation:

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

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

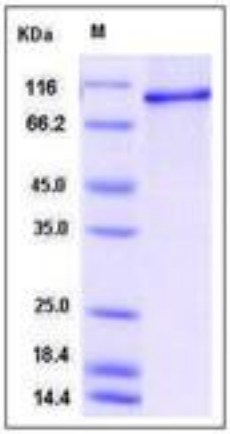
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

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-?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-?B may provide a basis for synergistic activation of transcription by IL-4 and activators of NF-?B.

References

1.Litterst CM, *et al*. (2001) Transcriptional activation by STAT6 requires the direct interaction with NCoA-1. J Biol Chem. 276 (49): 45713-21. 2.Stutz AM, *et al*. (1999) Functional synergism of STAT6 with either NF-kappa B or PU.1 to mediate IL-4-induced activation of IgE germline gene transcription. J Immunol. 163 (8): 4383-91. 3.Yang J, *et al*. (2002) Identification of p100 as a coactivator for STAT6 that bridges STAT6 with RNA polymerase II. EMBO J. 21 (18): 4950-8.