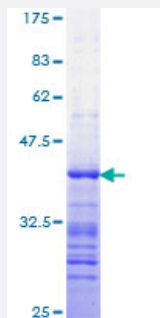


STAT3 (Human) Recombinant Protein (Q01)

Catalog # H00006774-Q01

Size 25 ug, 10 ug

Applications



Specification

Product Description	Human STAT3 partial ORF (NP_003141, 670 a.a. - 769 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	LVYLYPDIPKEEAFGKYCRPESQEHPADPGAAPYLKTKFICVPTTCSNTIDLPMSPRTLDSLMLQFGNNGEGAEPSAGGQFESLTFDMELTSECATSPM
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	36.74
Interspecies Antigen Sequence	Mouse (98); Rat (98)
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — STAT3

Entrez GeneID	6774
GeneBank Accession#	NM_003150
Protein Accession#	NP_003141
Gene Name	STAT3
Gene Alias	APRF, FLJ20882, HIES, MGC16063
Gene Description	signal transducer and activator of transcription 3 (acute-phase response factor)
Omim ID	102582
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is a member of the STAT protein family. In response to cytokines and growth factors, STAT family members are phosphorylated by the receptor associated kinases, and then form homo- or heterodimers that translocate to the cell nucleus where they act as transcription activators. This protein is activated through phosphorylation in response to various cytokines and growth factors including IFNs, EGF, IL5, IL6, HGF, LIF and BMP2. This protein mediates the expression of a variety of genes in response to cell stimuli, and thus plays a key role in many cellular processes such as cell growth and apoptosis. The small GTPase Rac1 has been shown to bind and regulate the activity of this protein. PIAS3 protein is a specific inhibitor of this protein. Three alternatively spliced transcript variants encoding distinct isoforms have been described. [provided by RefSeq]
Other Designations	DNA-binding protein APRF acute-phase response factor signal transducer and activator of transcription 3

Publication Reference

- [Quantification of total and phosphorylated STAT3 by calibrated western blotting.](#)

Nadine Köhler, Niloufarsadat Miri, Anna Dittrich.

STAR Protocols 2023 Sep; 4(3):102508.

Application: Calibrator, Quant, Human, HEK293 cells

- [Response to IL-6 trans- and IL-6 classic signalling is determined by the ratio of the IL-6 receptor \$\alpha\$ to gp130 expression: fusing experimental insights and dynamic modelling.](#)

Reeh H, Rudolph N, Billing U, Christen H, Streif S, Bullinger E, Schliemann-Bullinger M, Findeisen R, Schaper F, Huber HJ, Dittrich A.

Cell Communication and Signaling 2019 May; 17(1):46.

Application: Quant, WB-Re, Recombinant protein

Pathway

- [Acute myeloid leukemia](#)
- [Adipocytokine signaling pathway](#)
- [Chemokine signaling pathway](#)
- [Jak-STAT signaling pathway](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)

Disease

- [Abortion](#)
- [Asthma](#)
- [Autoimmune Diseases](#)
- [Birth Weight](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Bronchiolitis](#)
- [Carcinoma](#)

- [Cardiovascular Diseases](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Colitis](#)
- [Crohn Disease](#)
- [Depressive Disorder](#)
- [Dermatitis](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [DNA Damage](#)
- [Eczema](#)
- [Edema](#)
- [Fatty Liver](#)
- [Genetic Predisposition to Disease](#)
- [Genomic Instability](#)
- [Glioblastoma](#)
- [Glioma](#)
- [Hepatitis C](#)
- [Infant](#)
- [Inflammation](#)
- [Inflammatory Bowel Diseases](#)
- [Insulin Resistance](#)
- [Kidney Neoplasms](#)
- [Leukemia](#)

- [Liver Neoplasms](#)
- [Lung Neoplasms](#)
- [Lymphoma](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)
- [Multiple Sclerosis](#)
- [Neoplasm Metastasis](#)
- [Obesity](#)
- [Ovarian Neoplasms](#)
- [Pulmonary Disease](#)
- [Rectal Fistula](#)
- [Respiratory Syncytial Virus Infections](#)
- [Spondylitis](#)
- [Thyroid Neoplasms](#)
- [Tobacco Use Disorder](#)
- [Tooth Abnormalities](#)