

# **Product datasheet for TP312394M**

#### OriGene Technologies, Inc.

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### STAT3 (NM\_213662) Human Recombinant Protein

#### **Product data:**

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human signal transducer and activator of transcription 3 (acute-phase

response factor) (STAT3), transcript variant 3, 100 µg

Species: Human Expression Host: HEK293T

**Expression cDNA** >RC212394 representing NM\_213662 **Clone or AA** Red=Cloning site Green=Tags(s)

Sequence:

MAQWNQLQQLDTRYLEQLHQLYSDSFPMELRQFLAPWIESQDWAYAASKESHATLVFHNLLGEIDQQYSR FLQESNVLYQHNLRRIKQFLQSRYLEKPMEIARIVARCLWEESRLLQTAATAAQQGQANHPTAAVVTEK QQMLEQHLQDVRKRVQDLEQKMKVVENLQDDFDFNYKTLKSQGDMQDLNGNNQSVTRQKMQQLEQMLTAL

DQMRRSIVSELAGLLSAMEYVQKTLTDEELADWKRRQQIACIGGPPNICLDRLENWITSLAESQLQTRQQ
IKKLEELQQKVSYKGDPIVQHRPMLEERIVELFRNLMKSAFVVERQPCMPMHPDRPLVIKTGVQFTTKVR
LLVKFPELNYQLKIKVCIDKDSGDVAALRGSRKFNILGTNTKVMNMEESNNGSLSAEFKHLTLREQRCGN
GGRANCDASLIVTEELHLITFETEVYHQGLKIDLETHSLPVVVISNICQMPNAWASILWYNMLTNNPKNV
NFFTKPPIGTWDQVAEVLSWQFSSTTKRGLSIEQLTTLAEKLLGPGVNYSGCQITWAKFCKENMAGKGFS
FWVWLDNIIDLVKKYILALWNEGYIMGFISKERERAILSTKPPGTFLLRFSESSKEGGVTFTWVEKDISG

KTQIQSVEPYTKQQLNNMSFAEIIMGYKIMDATNILVSPLVYLYPDIPKEEAFGKYCRPESQEHPEADPG

SAAPYLKTKFICVTPFIDAVWK

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV** 

Tag: C-Myc/DDK
Predicted MW: 82.9 kDa

**Concentration:**  $>0.05 \mu g/\mu L$  as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by conventional

chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience some

loss of protein during the filtration process.



Storage: Store at -80°C.

**Stability:** Stable for 12 months from the date of receipt of the product under proper storage and handling

conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** NP 998827

 Locus ID:
 6774

 UniProt ID:
 P40763

 RefSeq Size:
 4819

 Cytogenetics:
 17q21.2

 RefSeq ORF:
 2166

**Synonyms:** ADMIO; ADMIO1; APRF; HIES

**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. This gene also plays a role in regulating host response to viral and bacterial infections. Mutations in this gene are associated with infantile-onset multisystem autoimmune disease and hyper-

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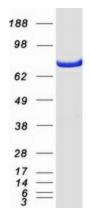
immunoglobulin E syndrome. [provided by RefSeq, Aug 2020]

**Protein Families:** Druggable Genome, Transcription Factors

Protein Pathways: Acute myeloid leukemia, Adipocytokine signaling pathway, Chemokine signaling pathway, Jak-STAT

signaling pathway, Pancreatic cancer, Pathways in cancer

## **Product images:**



Coomassie blue staining of purified STAT3 protein (Cat# [TP312394]). The protein was produced from HEK293T cells transfected with STAT3 cDNA clone (Cat# [RC212394]) using MegaTran 2.0 (Cat# [TT210002]).