



# Recombinant Mouse Signal transducer and activator of transcription 3 (Stat3)

<b>Product Code</b>	CSB-YP022812MO
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P42227
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Mus musculus (Mouse)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	<p>MAQWNQLQQL DTRYLEQLHQ LYSDSFPMEL RQFLAPWIES QDWAYAASKE            SHATLVFHNL LGEIDQQYSR FLQESNVLYQ HNLRRIKQFL QSRYLEKPME            IARIVARCLW EESRLLQTAA TAAQQGGQAN HPTAAVVTEK QQMLEQHLQD            VRKRVQDLEQ KMKVVENLQD DFDFNYKTLK SQGDMQDLNG            NNQSVTRQKM QQLEQMLTAL DQMRRSIVSE LAGLLSAMEY VQKTLTDEEL            ADWKRRQQA CIGGPPNICL DRLENWITSL AESQLQTRQQ IKKLEELQQK            VSYKGDPIVQ HRPMLERIV ELFRNLMKSA FVVERQPCMP MHPDRPLVIK            TGVQFTTKVR LLVKFPELNY QLKIKVCIDK DSGDVAALRG SRKFNILGTN            TKVMNMEESN NGSLSAEFKH LTLREQRCGN GGRANCDASL IVTEELHLIT            FETEVYHQGL KIDLETHSLP VVISNICQM PNAWASILWY NMLTNNPKNV            NFFTKPIGT WDQVAEVLWS QFSSTTKRGL SIEQLTTLAE KLLGPGVNYS            GCQITWAKFC KENMAGKGF5 FWVWLDNIID LVKKYILALW NEGYIMGFIS            KERERAILST KPPGTFLRF SESSKEGGVT FTWVEKDISG KTQIQSVEPY            TKQQLNMSF AEIIMGYKIM DATNILVSPL VYLYPDIPKE EAFGKYCRPE            SQEHPEADPG SAAPYLKTKF ICVPTTCSN TIDLPMSPRT LDSLMQFGNN            GEGAEPSAGG QFESLTFDMD LTSECATSPM</p>
<b>Source</b>	Yeast
<b>Target Names</b>	Stat3
<b>Protein Names</b>	Recommended name: Signal transducer and activator of transcription 3 Alternative name(s): Acute-phase response factor
<b>Expression Region</b>	1-770
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full length protein
<b>Target Details</b>	This protein 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.

---

**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

---

**Shelf Life**

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.