

Resource Summary Report

Generated by [RRID](#) on Aug 29, 2026

pMXs-Stat3-C

RRID:Addgene_13373

Type: Plasmid

Proper Citation

RRID:Addgene_13373

Plasmid Information

URL: <http://www.addgene.org/13373>

Proper Citation: RRID:Addgene_13373

Insert Name: signal transducer and activator of transcription 3 (dominant active mutant)

Organism: Mus musculus

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:16904174](#)

Vector Backbone Description: Backbone Size:4600; Vector Backbone:pMXs; Vector Types:Mammalian Expression, Retroviral; Bacterial Resistance:Ampicillin

Comments: The sequence of primer pMX-S1811 is GAC GGC ATC GCA GCT TGG ATA CAC.

Plasmid Name: pMXs-Stat3-C

Relevant Mutation: Changed Alanine 661 to cysteine and asparagine 663 to cysteine, dominant active mutation.

Record Creation Time: 20220422T221740+0000

Record Last Update: 20260829T075532+0000

Ratings and Alerts

No rating or validation information has been found for pMXs-Stat3-C.

No alerts have been found for pMXs-Stat3-C.

Data and Source Information

Usage and Citation Metrics

We found 17 mentions in open access literature.

Listed below are recent publications. The full list is available at [RRID](#) .

Attwell CL, et al. (2025) The transcription factor combination MEF2 and KLF7 promotes axonal sprouting in the injured spinal cord with functional improvement and regeneration-associated gene expression. *Molecular neurodegeneration*, 20(1), 18.

Fukasawa K, et al. (2023) MEK5-ERK5 Axis Promotes Self-renewal and Tumorigenicity of Glioma Stem Cells. *Cancer research communications*, 3(1), 148.

Niu M, et al. (2021) Inhibition of heat shock protein (HSP) 90 reverses signal transducer and activator of transcription (STAT) 3-mediated muscle wasting in cancer cachexia mice. *British journal of pharmacology*, 178(22), 4485.

Ono T, et al. (2020) Mechanical pain of the lower extremity after compression of the upper spinal cord involves signal transducer and activator of transcription 3-dependent reactive astrocytes and interleukin-6. *Brain, behavior, and immunity*, 89, 389.

Wang HF, et al. (2020) Defining Essential Enhancers for Pluripotent Stem Cells Using a Features-Oriented CRISPR-Cas9 Screen. *Cell reports*, 33(4), 108309.

Sahin GS, et al. (2020) Leptin stimulates synaptogenesis in hippocampal neurons via KLF4 and SOCS3 inhibition of STAT3 signaling. *Molecular and cellular neurosciences*, 106, 103500.

Cheng YP, et al. (2019) Blockade of STAT3 Signaling Contributes to Anticancer Effect of 5-Acetyloxy-6,7,8,4'-Tetra-Methoxyflavone, a Tangeretin Derivative, on Human Glioblastoma Multiforme Cells. *International journal of molecular sciences*, 20(13).

Lin Q, et al. (2019) The mechanism of the premetastatic niche facilitating colorectal cancer liver metastasis generated from myeloid-derived suppressor cells induced by the S1PR1-STAT3 signaling pathway. *Cell death & disease*, 10(10), 693.

Högstrand K, et al. (2018) Transformation of mouse T cells requires MYC and AKT activity in conjunction with inhibition of intrinsic apoptosis. *Oncotarget*, 9(30), 21396.

Wehde BL, et al. (2018) Janus Kinase 1 Plays a Critical Role in Mammary Cancer Progression. *Cell reports*, 25(8), 2192.

Baek SH, et al. (2017) Ginkgolic Acid C 17:1, Derived from Ginkgo biloba Leaves, Suppresses Constitutive and Inducible STAT3 Activation through Induction of PTEN and SHP-1 Tyrosine Phosphatase. *Molecules (Basel, Switzerland)*, 22(2).

Ma JF, et al. (2017) STAT3 promotes IFN γ /TNF γ -induced muscle wasting in an NF- κ B-dependent and IL-6-independent manner. *EMBO molecular medicine*, 9(5), 622.

Or CR, et al. (2016) Diphenhydramine induces melanoma cell apoptosis by suppressing STAT3/MCL-1 survival signaling and retards B16-F10 melanoma growth in vivo. *Oncology reports*, 36(6), 3465.

Seto DN, et al. (2015) A Key Role for Leukemia Inhibitory Factor in C26 Cancer Cachexia. *The Journal of biological chemistry*, 290(32), 19976.

Kohro Y, et al. (2015) A new minimally-invasive method for microinjection into the mouse spinal dorsal horn. *Scientific reports*, 5, 14306.

Tadokoro T, et al. (2014) IL-6/STAT3 promotes regeneration of airway ciliated cells from basal stem cells. *Proceedings of the National Academy of Sciences of the United States of America*, 111(35), E3641.

Huh JE, et al. (2013) IL-6 is produced by adipose-derived stromal cells and promotes osteogenesis. *Biochimica et biophysica acta*, 1833(12), 2608.