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: 20260815T080538+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

Source: Addgene

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?/TNF?-induced muscle wasting in an NF-?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.