

Resource Summary Report

Generated by [RRID](#) on Aug 25, 2026

Stat3 Y705F Flag pRc/CMV

RRID:Addgene_8709

Type: Plasmid

Proper Citation

RRID:Addgene_8709

Plasmid Information

URL: <http://www.addgene.org/8709>

Proper Citation: RRID:Addgene_8709

Insert Name: Stat3 Y705F

Organism: Mus musculus

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:9153303](#)

Vector Backbone Description: Backbone Marker:Invitrogen; Backbone Size:5500; Vector Backbone:pRc/CMV; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Comments: Diagnostic Restriction Digest with BamHI (3.2kb, 2.8kb, and 2.0kb). Due to a stop codon error made when tagging the Stat3 clone with FLAG (DYKDDDDK) additional residues follow the tag (GPYSIVSPKC STOP). The Apal cloning site is GGG CCC, which encodes the G and P residues coming after the FLAG tag. Therefore, if the insert is removed with a NotI and Apal digestion, it will not have a stop codon included. * E16K mutation found during QC

Plasmid Name: Stat3 Y705F Flag pRc/CMV

Relevant Mutation: Y705F

Record Creation Time: 20220422T222559+0000

Record Last Update: 20260815T082140+0000

Ratings and Alerts

No rating or validation information has been found for Stat3 Y705F Flag pRc/CMV.

No alerts have been found for Stat3 Y705F Flag pRc/CMV.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 20 mentions in open access literature.

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

Zhang M, et al. (2025) SMAD2 S-palmitoylation promotes its linker region phosphorylation and TH17 cell differentiation in a mouse model of multiple sclerosis. Science signaling, 18(888), eadr2008.

Jeong HY, et al. (2024) GRIM-19-mediated induction of mitochondrial STAT3 alleviates systemic sclerosis by inhibiting fibrosis and Th2/Th17 cells. Experimental & molecular medicine, 56(12), 2739.

Takeuchi Y, et al. (2020) Kruppel-like factor 4 upregulates matrix metalloproteinase 13 expression in chondrocytes via mRNA stabilization. Cell and tissue research, 382(2), 307.

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.

Alsaffar H, et al. (2018) Interleukin-6 promotes a sustained loss of endothelial barrier function via Janus kinase-mediated STAT3 phosphorylation and de novo protein synthesis. American journal of physiology. Cell physiology, 314(5), C589.

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.

Kumar R, et al. (2016) MicroRNA 17-5p regulates autophagy in Mycobacterium tuberculosis-infected macrophages by targeting Mcl-1 and STAT3. Cellular microbiology, 18(5), 679.

Kumar R, et al. (2016) Proline-rich tyrosine kinase 2 via enhancing signal transducer and activator of transcription 3-dependent cJun expression mediates retinal neovascularization. Scientific reports, 6, 26480.

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

Gujral TS, et al. (2014) A noncanonical Frizzled2 pathway regulates epithelial-mesenchymal transition and metastasis. Cell, 159(4), 844.

Prabhavathy D, et al. (2014) HPV16 E2-mediated potentiation of NF- κ B activation induced by TNF- α involves parallel activation of STAT3 with a reduction in E2-induced apoptosis. *Molecular and cellular biochemistry*, 394(1-2), 77.

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.

Anderson JL, et al. (2014) Phosphoproteomic profiling reveals IL6-mediated paracrine signaling within the Ewing sarcoma family of tumors. *Molecular cancer research : MCR*, 12(12), 1740.

Kleinridders A, et al. (2013) Leptin regulation of Hsp60 impacts hypothalamic insulin signaling. *The Journal of clinical investigation*, 123(11), 4667.

Yamamoto K, et al. (2013) Everolimus-induced human keratinocytes toxicity is mediated by STAT3 inhibition. *Journal of experimental & clinical cancer research : CR*, 32(1), 83.

Masola V, et al. (2013) Everolimus-induced epithelial to mesenchymal transition in immortalized human renal proximal tubular epithelial cells: key role of heparanase. *Journal of translational medicine*, 11, 292.

Mackenzie GG, et al. (2013) Targeting mitochondrial STAT3 with the novel phospho-valproic acid (MDC-1112) inhibits pancreatic cancer growth in mice. *PloS one*, 8(5), e61532.

Bonetto A, et al. (2012) JAK/STAT3 pathway inhibition blocks skeletal muscle wasting downstream of IL-6 and in experimental cancer cachexia. *American journal of physiology. Endocrinology and metabolism*, 303(3), E410.

Chen Y, et al. (2010) Gprc5a deletion enhances the transformed phenotype in normal and malignant lung epithelial cells by eliciting persistent Stat3 signaling induced by autocrine leukemia inhibitory factor. *Cancer research*, 70(21), 8917.

West NR, et al. (2010) S100A7 (psoriasin) is induced by the proinflammatory cytokines oncostatin-M and interleukin-6 in human breast cancer. *Oncogene*, 29(14), 2083.