

## Product datasheet for RC204922L4

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## STAT3 (NM\_003150) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type: Expression Plasmids** 

**Product Name:** STAT3 (NM\_003150) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: STAT3

ADMIO; ADMIO1; APRF; HIES Synonyms:

**Mammalian Cell** Puromycin

Selection:

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

The ORF insert of this clone is exactly the same as(RC204922). **ORF Nucleotide** 

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF.

ACCN: NM\_003150

**ORF Size:** 2307 bp





#### STAT3 (NM\_003150) Human Tagged Lenti ORF Clone - RC204922L4

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

**RefSeq:** <u>NM 003150.3</u>

RefSeq Size: 4953 bp
RefSeq ORF: 2310 bp
Locus ID: 6774

 UniProt ID:
 P40763

 Cytogenetics:
 17q21.2

**Domains:** SH2, STAT

**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

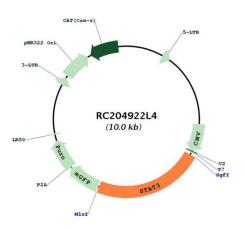
MW: 88 kDa



#### **Gene 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-immunoglobulin E syndrome. [provided by RefSeq, Aug 2020]

### **Product images:**



Circular map for RC204922L4