

## Product datasheet for RC209429L3

### STAT5B (NM\_012448) Human Tagged Lenti ORF Clone

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids  |
| Product Name:             | STAT5B (NM_012448) Human Tagged Lenti ORF Clone                |
| Tag:                      | Myc-DDK  |
| Symbol:                   | STAT5B   |
| Synonyms:                 | GHISID2; STAT5   |
| Mammalian Cell Selection: | Puromycin  |
| Vector:                   | pLenti-C-Myc-DDK-P2A-Puro (PS100092)                           |
| E. coli Selection:        | Chloramphenicol (34 ug/mL)                                     |
| ORF Nucleotide Sequence:  | The ORF insert of this clone is exactly the same as(RC209429). |
| Restriction Sites:        | SgfI-MluI  |
| Cloning Scheme:           |  |

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF.

|           |           |
|-----------|-----------|
| ACCN:     | NM_012448 |
| ORF Size: | 2361 bp   |



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**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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:** [NM\\_012448.3](#)

**RefSeq Size:** 5171 bp

**RefSeq ORF:** 2364 bp

**Locus ID:** 6777

**UniProt ID:** [P51692](#)

**Cytogenetics:** 17q21.2

**Domains:** SH2, STAT

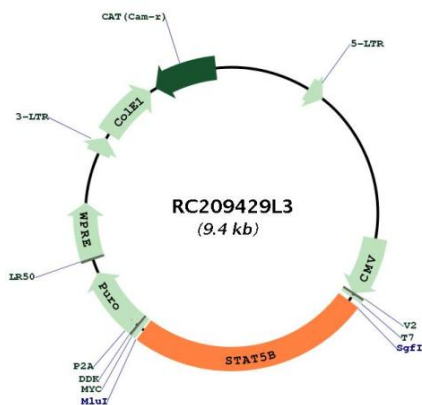
**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS, Stem cell relevant signaling - JAK/STAT signaling pathway, Transcription Factors

**Protein Pathways:** Acute myeloid leukemia, Chemokine signaling pathway, Chronic myeloid leukemia, ErbB signaling pathway, Jak-STAT signaling pathway, Pathways in cancer

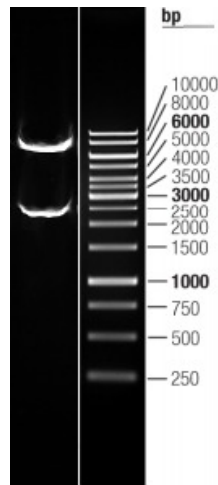
**MW:** 89.7 kDa

**Gene Summary:**

The protein encoded by this gene is a member of the STAT family of transcription factors. 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 mediates the signal transduction triggered by various cell ligands, such as IL2, IL4, CSF1, and different growth hormones. It has been shown to be involved in diverse biological processes, such as TCR signaling, apoptosis, adult mammary gland development, and sexual dimorphism of liver gene expression. This gene was found to fuse to retinoic acid receptor-alpha (RARA) gene in a small subset of acute promyelocytic leukemias (APLL). The dysregulation of the signaling pathways mediated by this protein may be the cause of the APLL. [provided by RefSeq, Jul 2008]

**Product images:**


Circular map for RC209429L3



Double digestion of RC209429L3 using SgfI and MluI