

Product datasheet for SC327722

TSLP (NM 138551) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: TSLP (NM_138551) Human Untagged Clone

Tag: Tag Free

Symbol: TSLP

Mammalian Cell None

Selection:

Vector:

pCMV6-XL5

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_138551 edited

GGGGGACTCTCGACTTGTGTTCCCCGCTCCTCCCTGACCTTCCTCCCCTCCCCTTTCACT CAATTCTCACCAACTCTTTCTCTCTCTGGTGTTTTCTCCTTTTCTCGTAAACTTTGCCGC CTATGAGCAGCCACATTGCCTTACTGAAATCCAGAGCCTAACCTTCAATCCCACCGCCGG CTGCGCGTCGCCAAAGAAATGTTCGCCATGAAAACTAAGGCTGCCTTAGCTATCTG GTGCCCAGGCTATTCGGAAACTCAGATAAATGCTACTCAGGCAATGAAGAAGAGGAGAAA AAGGAAAGTCACAACCAATAAATGTCTGGAACAAGTGTCACAATTACAAGGATTGTGGCG TCGCTTCAATCGACCTTTACTGAAACAACAGTAAACCATCTTTATTATGGTCATATTTCA CAGCACCAAAATAAATCATCTTTATTAAGTAGATGAAACATTAACTCTAACTGTGACAAA TTTTATTGTGTAAGTTTATAATGCAGGGGAAGTACTACTCCTCAAATGTTGAGGGAAGCT TCCATAACATTGATGACTGGCTTCATGGCAGTAATTCTCGGCTGTAGTTGCATAAGCATT GCTCAAGAGGAAAATCCAAAAGTGCAGCAGGAGAACTTTTTTCCCTGAAAAAGGAAAAAT AATGACACTTCTTGTGTTAAACTAAAAATTTACAAGAGAAGAAAGTGAAAGCAAATGGGG TTTCACAAATAGTTGTAAATATAGTGAAGCAATTTGAAATAATTTTCAAGCAAAGTATTG TGAAAGTATTCTAAGCCAAGTTTTAAATATTATCTAACAGACAAGAGTGGTATATACAAG TAGATCCTGAGAAGTACCTTTGTTACAGCTACTATAAATATACATATAAATTATAGAATC TACTTTAATTTATTTTGTGAACACTTTTGAAAATGTACATGTTCCTTTGTAATTGACACT

Restriction Sites: Please inquire **ACCN:** NM 138551

Insert Size: 2411 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 customercom 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. <u>More info</u>

OTI Annotation:

This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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.

RefSeg: NM 138551.3, NP 612561.2

 RefSeq Size:
 2411 bp

 RefSeq ORF:
 192 bp

 Locus ID:
 85480

 UniProt ID:
 Q969D9

 Cytogenetics:
 5q22.1

Protein Families: Druggable Genome

Protein Pathways: Cytokine-cytokine receptor interaction, Jak-STAT signaling pathway



Gene Summary:

This gene encodes a hemopoietic cytokine proposed to signal through a heterodimeric receptor complex composed of the thymic stromal lymphopoietin receptor and the IL-7R alpha chain. It mainly impacts myeloid cells and induces the release of T cell-attracting chemokines from monocytes and enhances the maturation of CD11c(+) dendritic cells. The protein promotes T helper type 2 (TH2) cell responses that are associated with immunity in various inflammatory diseases, including asthma, allergic inflammation and chronic obstructive pulmonary disease. The protein is therefore considered a potential therapeutic target for the treatment of such diseases. In addition, the shorter (predominant) isoform is an antimicrobial protein, displaying antibacterial and antifungal activity against B. cereus, E. coli, E. faecalis, S. mitis, S. epidermidis, and C. albicans. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Jul 2020]

Transcript Variant: This variant (2, also known as sfTSLP) lacks two 5' exons but contains an alternate 5' exon, differs in the 5' UTR, and uses a downstream in-frame start codon, compared to variant 1. The encoded isoform (2) is shorter at the N-terminus, compared to isoform 1. This is the predominant isoform, and it exhibits a much stronger antimicrobial activity compared to the longer isoform lfTSLP (PMID:24850429).