

Product datasheet for **MC222579**

Il6st (NM_010560) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Il6st (NM_010560) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Il6st
Synonyms:	5133400A03Rik; AA389424; BB405851; CD130; D13Erttd699e; gp130
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >MC222579 representing NM_010560
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCAGCACCAAGGATTTGGCTAGCGCAAGCTTTGCTTTTTTCTCACCCTGAATCTATAGGTCAAC
 TTTTGGAAACCGTGTGGTTACATCTACCCTGAATTTCCAGTTGTCCAGCGGGCTCGAACTTCACTGCCAT
 TTGTGTGCTGAAGGAGCGTGTCTGCAGCATTACTACGTGAATGCCAGCTACATCGTGTGGAAGACCAAC
 CATGCTGCTGTTCCAGGGAGCAGGTCACTGTCATCAACAGAACCACGTCCAGTGTACGTTTACAGACG
 TGGTCTCCCGAGCGTGCAGCTCACCTGCAACATCCTGTCCTTTGGGCAGATCGAGCAGAATGTGTATGG
 AGTCACCATGCTTTCAGGCTTCTCCAGATAAACCTACAAATTTGACTTGCATTGTGAATGAGGGGAAG
 AATATGCTGTGCCAGTGGGACCCCGAAGGGAGACTTACCTTGAACAAACTACACTTTGAAATCAGAGT
 GGGCAACAGAGAAGTTTCTGATTGCCAGTCAAAGCATGGCACTTCATGTATGGTCAGCTACATGCCAC
 CTATTATGTCAACATTGAAGTCTGGGTGGAAGCAGAGAATGCCCTTGGGAAGGTCTCCTCAGAGTCTATC
 AATTTTGACCCCGTGGATAAAGTGAAACCCACCCACCATATAATTTATCAGTGACCAACTCAGAAGAAT
 TATCCAGTATATTAAGCTATCATGGGTCAAGTTCAGGGCTGGGCGGTCTTTAGATCTAAAGTCTGACAT
 CCAATATAGGACCAAGATGCCTCAACTTGGATCCAGGTCCCTCTTGAAGATACAATGTCTCCTCGAACT
 TCCTTCACTGTGCAGGACCTCAAGCCTTTTACAGAATAGTGTTTAGGATCCGGTCCATTAAGGACAGTG
 GGAAGGGCTACTGGAGTGACTGGAGTGAGGAGGCTAGTGGGACCACATACGAAGACAGACCATCCAGACC
 ACCAAGTTTCTGGTATAAGACAAATCCATCCCATGGGCAGGAATATAGATCTGTACGGCTCATATGGAAG
 GCACTGCCTCTTCTGAAGCCAATGGGAAAATCTTGGATTATGAAGTGATTCTTACGCAGTCAAAGTCCG
 TCTCACAAACGTACACAGTCACTGGCACAGAGCTGACCGTGAATCTCACCATGACCGCTATGTCGGCTC
 TCTAGCAGCAAGAAACAAGGTGGGCAAATCAGCTGCAGCTGTCTCACCATCCCCAGCCCCCAGCTCACA
 GCTGCTTATTCTGTAGTGAATCTTAAAGCATTTCCAAAAGATAACCTGCTCTGGGTGGAATGGACACCTC
 CACCTAAACCCGTGAGCAAGTACATCTTAGAGTGGTGTGTGTTGTGAGAGAACGCACCCTGTGTTGAAGA
 CTGGCAGCAGGAAGACGCTACCGTGAATCGGACCCACTTGAAGGACGCCTCCTGGAGAGCAAGTGTAT
 CAAATCACAGTAACTCCCGTATTCGCCACGGGGCCGGAGGCTCTGAGTCTTGAAGGCGTACCTCAAAC
 AAGCCGCTCCTGCCAGAGGACCGACTGTTCCGACAAAAGAAAGTGGGAAAAATGAAGCTGTCTTAGCGTG
 GGACCAGATTCTGTGGACGACCAGAATGGCTTATTAGAACTACTCCATATCTTACAGAACAGCGTG
 GGAAGGAGATGGTTGTGCATGTGGATTCTTCTCACACGGAGTACAGCTGTCTCTGAGTAGTGATA
 CGTTGTACATGGTCCGAATGGCCCGGTACACAGATGAAGGTGGGAAAGATGGGCCGGAATCACTTTTAC
 AACACCAAAGTTCGCTCAAGGAGAAATAGAAGCCATAGTCGTGCCTGTGTGCTTAGCCTTCTCCTGACA
 ACCCTGCTGGGCGTCTTGTCTGCTTTAACAAACGAGATCTAATTAATAAACACATCTGGCCTAATGTTT
 CTGATCCTTCCAAGAGTCATATTGCCAGTGGTCACTCACACCCCCCAAGGCACAATTTAACTCCAA
 AGATCAAATGACTCGGACGGCAATTTCACTGATGTAAGCGTTGTGGAATAGAAGCAAACAAGAAG
 CCTTGTCCAGATGACCTGAAGTCCGTGGACCTGTTCAAGAAGGAGAAAGTGAAGTACAGAAGGGCACAGCA
 GTGGCATCGGGGCTCTCATGCATGTCCTCCTCAGGCCAGCATCTCCAGCAACGAGGAGAATGAGT
 TGCTCAGAGCACCGCCAGCACGGTGCAGTACTCCACTGTGGTGCACAGCGGCTACAGGCACCAGTCCCG
 TCCGTGCAAGTGTCTCAAGTCCGAGTCCACCCAGCCCCTGCTAGACTCGGAGGAGCGCCAGAAGACC
 TGACGCTGGTGGATAGTGTAGACGGTGGGATGAGATCTTGCCAGGCAATCGTATTTCAAGCAGAAGT
 CAGTCAGCCTGAAGCCTGTCCAGAGATTTACATTTTGAAGGTCAAACCAGTTTTGTCCGGCAATGAG
 GAGGATTTTGTGACTGAAGCAGCAGGTTTCCAGTACATTTTCTCAGCCCTATGGATCCGAGCAAC
 GGAGGCTGTTTCAAGGAGGCTCTACAGCGGATGCTCTTGGCACGGGGCTGATGGACAGATGGAGAGATT
 TGAATCTGTTGGAATGGAGACCACAATTGATGAAGAAATCCCAAAGTACTTGCCACAGACTGTAAGA
 CAAGGTGGCTACATGCCGAG**TGA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Chromatograms: https://cdn.origene.com/chromatograms/ja1768_d09.zip

Restriction Sites: Sgfl-Mlul

ACCN: NM_010560

Insert Size: 2754 bp

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 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](#)

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: [BC058679](#), [AAH58679](#)

RefSeq Size: 5452 bp

RefSeq ORF: 2754 bp

Locus ID: 16195

UniProt ID: [Q00560](#)

Cytogenetics: 13 63.73 cM

Gene Summary:

Signal-transducing molecule. The receptor systems for IL6, LIF, OSM, CNTF, IL11, CTF1 and BSF3 can utilize IL6ST for initiating signal transmission. Binding of IL6 to IL6R induces IL6ST homodimerization and formation of a high-affinity receptor complex, which activates Janus kinases (PubMed:1602143). That causes phosphorylation of IL6ST tyrosine residues which in turn activates STAT3 (PubMed:10661409). Mediates signals which regulate immune response, hematopoiesis, pain control and bone metabolism (PubMed:10661409, PubMed:26255596, PubMed:25057188, PubMed:8552649). Has a role in embryonic development (PubMed:10661409). Does not bind IL6 (By similarity). Essential for survival of motor and sensory neurons and for differentiation of astrocytes (PubMed:10377352). Required for expression of TRPA1 in nociceptive neurons (PubMed:25057188). Required for the maintenance of PTH1R expression in the osteoblast lineage and for the stimulation of PTH-induced osteoblast differentiation (PubMed:25228504). Required for normal trabecular bone mass and cortical bone composition (PubMed:24339143, PubMed:9348227, PubMed:26255596).[UniProtKB/Swiss-Prot Function]