

Product datasheet for **SC122566**

IL1 beta (IL1B) (NM_000576) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: IL1 beta (IL1B) (NM_000576) Human Untagged Clone
Tag: Tag Free
Symbol: IL1 beta
Synonyms: IL-1; IL1-BETA; IL1beta; IL1F2
Mammalian Cell Selection: None
Vector: pCMV6-XL5
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_000576 edited
 GAATCCCAGGATATCGTCGACCCACGCTCCGCCACGCGTCCGCCACGCGTCCGCCAACCTCTTC
 GAGGCACAAGGCACAACAGGCTGCTCTGGGATTCTTTCAGCCAATCTTCATTGCTCAAGTGTCTGAAGC
 AGCCATGGCAGAAGTACCTGAGCTCGCCAGTGAATGATGGCTTATTACAGTGGCAATGAGGATGACTTG
 TTCTTTGAAGCTGATGGCCCTAAACAGATGAAAGTCTCCTTCCAGGACCTGGACCTCTGCCCTCTGGATG
 GCGGCATCCAGCTACGAATCTCCGACCACCTACAGCAAGGGCTTCAGGCAGGCCGCGTCAAGTGTGT
 GGCCATGGACAAGCTGAGGAAGATGCTGGTTCCTGCCACAGACCTTCCAGGAGAATGACCTGAGCACC
 TTCTTTCCCTTCTTTGAAGAAGAACCTATCTTCTCGACACATGGGATAACGAGGCTTATGTGCACG
 ATGCACCTGTACGATCACTGAAGTGCACGCTCCGGGACTCACAGCAAAAAGCTTGGTGTGTCTGGTCC
 ATATGAACTGAAAGCTCTCCACCTCCAGGGACAGGATATGGAGCAACAAGTGGTGTCTCCATGTCTTT
 GTACAAGGAGAAGAAAGTAAATGACAAAAACCTGTGGCCTTGGGCCTCAAGGAAAAGAATCTGTACCTGT
 CCTGCGTGTGAAAGATGATAAGCCCACTCTACAGCTGGAGAGGTAGATCCCAAAAATTACCCAAAGAA
 GAAGATGGAAAAGCGATTTGTCTTCAACAAGATAGAAATCAATAACAAGCTGGAATTTGAGTCTGCCAG
 TTCCCAACTGGTACATCAGCACCTCTCAAGCAGAAAACATGCCCGTCTTCTGGGAGGGACCAAAGGCG
 GCCAGGATATAACTGACTTCACCATGCAATTTGTGTCTTCTAAAGAGAGCTGTACCCAGAGAGTCTGT
 GCTGAATGTGGACTCAATCCCTAGGGCTGGCAGAAAGGGAACAGAAAGGTTTTTGTGAGTACGGCTATAGCC
 TGGACTTTCCTGTGTCTACACCAATGCCCACTGCCTGCCTTAGGGTAGTGCTAAGAGGATCTCCTGTC
 CATCAGCCAGGACAGTCAAGCTCTCTCTTTCAGGGCCAATCCCCAGCCCTTTTGTGAGCCAGGCCTCTC
 TCACCTCTCCTACTCACTTAAAGCCCGCTGACAGAAACCAGGCCACATTTGGTTCTAAGAAACCCTCT
 GTATTCGCTCCACATTCTGATGAGCAACCGCTTCCCTATTTATTTATTTATTTGTTTGTGTTTTAT
 TCATTGGTCTAATTTATTTCAAAGGGGGCAAGAAGTAGCAGTGTCTGTAAGAGCCTAGTTTTTAATAGC
 TATGGAATCAATTTCAATTTGGACTGGTGTGCTCTTTAAATCAAGTCTTTAATTAAGACTGAAAAAT
 ATAAGCTCAGATTATTTAAATGGGAATATTTATAAATGAGCAAAATATCATACTGTTCAATGGTTCTGAAA
 TAAACTTCACTGAAAGGGCGGCCG



[View online »](#)

5' Read Nucleotide Sequence:	>OriGene 5' read for NM_000576 unedited NGCCGTTCAAATTTGTAACGACTCATATAGGCGGCCGCGNATCCCGGGNAATCGTCTGA CCCACGCGTCCGCCACGCGTCCGCCACGCGTCCGACCAAACCTCTTCGAGGCACAAGG CACAACAGGCTGCTCTGGGATTCTTTCAGCCAATCTTCATTGCTCAAGTGTCTGAAGCA GCCATGGCAGAAGTACCTGAGCTCGCCAGTGAAATGATGGCTTATTACAGTGGCAATGAG GATGACTTGTCTTTGAAGCTGATGGCCCTAACAGATGAAGTGCTCCTCCAGGACCTG GACCTCTGCCCTCTGGATGGCGGCATCCAGCTACGAATCTCCGACCACCACTACAGCAAG GGCTTCAGGCAGGCCGCGTCAGTTGTTGTGGCCATGGACAAGCTGAGGAAGATGCTGGTT CCCTGCCACAGACCTTCCAGGAGAATGACCTGAGCACCTTCTTCCCTTCATCTTTGAA GAAGAACCTATCTTCTTCGACACATGGGATAACGAGGCTTATGTGCACGATGCACCTGTA CGATCACTGAACTGCACGCTCCGGGACTCACAGCAAANAAGCTTGGTGATGTCTGGTCCA TATGAACTGAAAGCTCTCCACCTCCAGGGACAGGATATGGAGCAACAAGTGGTGTCTCC ATGTCCTTTGTACAAGGAGAAGAAAGTAATGACAAAATACCTGTGGCCTTGGGCCTCAAG GAAAAGAATCTGTACCTGTCCTGCGTGTGAAAGATGATAAGCCCACTCTACAGCTGGAG AGTGTAGATCCCAAAAATTACCCAAAGAAGAAGATGAAAAGCGATTTGTCTTNCACAG ATAGAAATCAATAACAAGCTGGAATTNGAGTCTGCCCAGTCCCCCACTGGTAC
Restriction Sites:	Please inquire
ACCN:	NM_000576
Insert Size:	1522 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:	<ol style="list-style-type: none"> 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_000576.2 , NP_000567.1
RefSeq Size:	1498 bp
RefSeq ORF:	810 bp

Locus ID:	3553
UniProt ID:	P01584
Cytogenetics:	2q14.1
Protein Families:	Druggable Genome, Secreted Protein
Protein Pathways:	Alzheimer's disease, Apoptosis, Cytokine-cytokine receptor interaction, Cytosolic DNA-sensing pathway, Graft-versus-host disease, Hematopoietic cell lineage, MAPK signaling pathway, NOD-like receptor signaling pathway, Prion diseases, Toll-like receptor signaling pathway, Type I diabetes mellitus
Gene Summary:	<p>The protein encoded by this gene is a member of the interleukin 1 cytokine family. This cytokine is produced by activated macrophages as a proprotein, which is proteolytically processed to its active form by caspase 1 (CASP1/ICE). This cytokine is an important mediator of the inflammatory response, and is involved in a variety of cellular activities, including cell proliferation, differentiation, and apoptosis. The induction of cyclooxygenase-2 (PTGS2/COX2) by this cytokine in the central nervous system (CNS) is found to contribute to inflammatory pain hypersensitivity. Similarly, IL-1B has been implicated in human osteoarthritis pathogenesis. Patients with severe Coronavirus Disease 2019 (COVID-19) present elevated levels of pro-inflammatory cytokines such as IL-1B in bronchial alveolar lavage fluid samples. The lung damage induced by the Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is to a large extent, a result of the inflammatory response promoted by cytokines such as IL-1B. This gene and eight other interleukin 1 family genes form a cytokine gene cluster on chromosome 2. [provided by RefSeq, Jul 2020]</p>