

Product datasheet for **SC303605**

CTLA4 (NM_005214) Human Untagged Clone

Product data:

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|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | CTLA4 (NM_005214) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | CTLA4 |
| Synonyms: | ALPS5; CD; CD152; CELIAC3; CTLA-4; GRD4; GSE; IDDM12 |
| Mammalian Cell Selection: | None |
| Vector: | <u>pCMV6-XL6</u> |
| E. coli Selection: | Ampicillin (100 ug/mL) |
| Fully Sequenced ORF: | >NCBI ORF sequence for NM_005214, the custom clone sequence may differ by one or more nucleotides |

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ATGGCTTGCCTTGGATTTGAGCGGCACAAGGCTCAGCTGAACCTGGCTACCAGGACCTGGCCCTGCACTC
TCCTGTTTTTCTTCTCTTCATCCCTGTCTTCTGCAAAGCAATGCACGTGGCCAGCCTGCTGTGGTACT
GGCCAGCAGCCGAGGCATCGCCAGCTTTGTGTGTGAGTATGCATCTCCAGGCAAAGCCACTGAGGTCCGG
GTGACAGTGCTTCGGCAGGCTGACAGCCAGGTGACTGAAGTCTGTGCGGCAACCTACATGATGGGAATG
AGTTGACCTTCTAGATGATTCCATCTGCACGGGCACCTCCAGTGGAAATCAAGTGAACCTCACTATCCA
AGGACTGAGGGCCATGGACACGGGACTCTACATCTGCAAGGTGGAGCTCATGTACCCACCGCCATACTAC
CTGGGCATAGGCAACGGAACCCAGATTTATGTAATTGATCCAGAACCGTGCCAGATTCTGACTTCCTCC
TCTGGATCCTTGACAGAGTTAGTTGCGGGTTGTTTTTTATAGCTTCTCCTCACAGCTGTTTCTTTGAG
CAAAATGCTAAAGAAAAGAAGCCCTTTACAACAGGGTCTATGTGAAAATGCCCAACAGAGCCAGAA
TGTGAAAAGCAATTTGAGCCTTATTTTATCCCATCAATTGA
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|--------------------|----------------|
| Restriction Sites: | Please inquire |
| ACCN: | NM_005214 |
| Insert Size: | 750 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 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: The ORF of this clone has been fully sequenced and found to be a perfect match to NM_005214.3.

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_005214.3](#), [NP_005205.2](#)

RefSeq Size: 1988 bp

RefSeq ORF: 672 bp

Locus ID: 1493

UniProt ID: [P16410](#)

Cytogenetics: 2q33.2

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Autoimmune thyroid disease, Cell adhesion molecules (CAMs), T cell receptor signaling pathway

Gene Summary:

This gene is a member of the immunoglobulin superfamily and encodes a protein which transmits an inhibitory signal to T cells. The protein contains a V domain, a transmembrane domain, and a cytoplasmic tail. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. The membrane-bound isoform functions as a homodimer interconnected by a disulfide bond, while the soluble isoform functions as a monomer. Mutations in this gene have been associated with insulin-dependent diabetes mellitus, Graves disease, Hashimoto thyroiditis, celiac disease, systemic lupus erythematosus, thyroid-associated orbitopathy, and other autoimmune diseases. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer membrane-bound isoform CTLA4-TM.