

Product datasheet for RC213631

CTLA4 (NM_001037631) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: CTLA4 (NM_001037631) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: CTLA4
Synonyms: ALPS5; CD; CD152; CELIAC3; CTLA-4; GRD4; GSE; IDDM12
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC213631 representing NM_001037631
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCTTGCCTTGGATTTAGCGGCACAAAGGCTCAGCTGAACCTGGCTACCAGGACCTGGCCCTGCACTC
TCCTGTTTTTCTCTTTCATCCCTGTCTTCTGCAAAGCAATGCACGTGGCCAGCCTGCTGTGGTACT
GGCCAGCAGCCGAGGCATCGCCAGCTTTGTGTGTGAGTATGCATCTCCAGGCAAAGCCACTGAGGTCCGG
GTGACAGTGCTTCGGCAGGCTGACAGCCAGGTGACTGAAGTCTGTGCGGCAACCTACATGATGGGAATG
AGTTGACCTTCTAGATGATTCCATCTGCACGGGCACCTCCAGTGAAATCAAGTGAACCTCACTATCCA
AGGACTGAGGGCCATGGACACGGGACTCTACATCTGCAAGGTGGAGCTCATGTACCCACCGCCACTACTAC
CTGGGCATAGGCAACGGAACCCAGATTTATGTAATTGCTAAAGAAAAGAAGCCCTTTACAACAGGGGTC
TATGTGAAAATGCCCAACAGAGCCAGAATG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC213631 representing NM_001037631
Red=Cloning site Green=Tags(s)

MACLGFQRHKAQLNLATRTWPCTLLFLLFIPVFCKAMHVAQPAVVLASSRGIASFVCEYASPGKATEVR
VTVLRQADSQVTEVCAATYMMGNELTFLDSDICTGTSSGNQVNLTIQGLRAMDTGLYICKVELMYPPIY
LGIGNGTQIYVIAKEKKPSYNRGLCENAPNRARM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

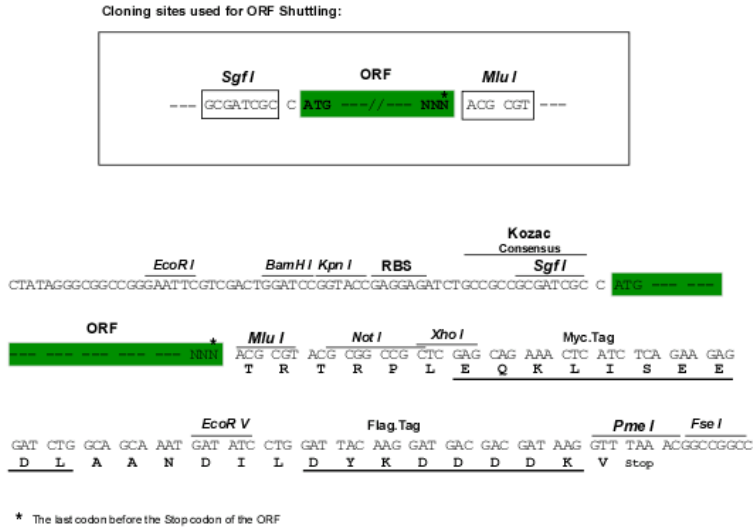
Chromatograms: https://cdn.origene.com/chromatograms/ja1459_b04.zip



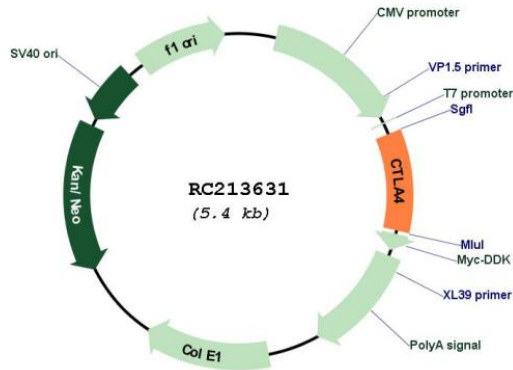
[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



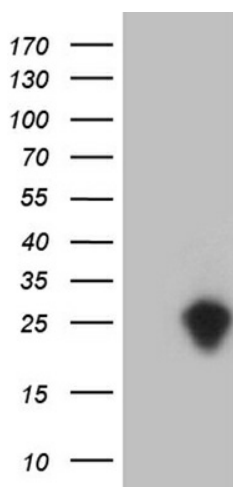
ACCN: NM_001037631

ORF Size: 522 bp

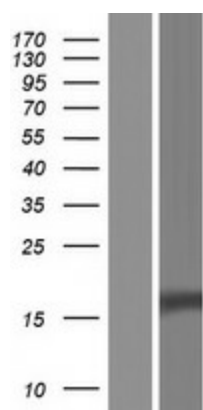
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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.</p> <p>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</p>
OTI Annotation:	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
Components:	<p>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).</p>
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_001037631.3
RefSeq Size:	1878 bp
RefSeq ORF:	525 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
MW:	19.15 kDa

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]

Product images:


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CTLA4 (Cat# RC213631, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CTLA4 (Cat# [TA810204])(1:500). Positive lysates [LY421970] (100ug) and [LC421970] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY421970]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213631 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).