

Product datasheet for **RC203741**

LTA (NM_000595) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: LTA (NM_000595) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: LTA
Synonyms: LT; TNFB; TNFSF1; TNLG1E
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC203741 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGACACCACCTGAACGTCTCTTCTCCCAAGGGTGCCTGGCACCACCCTACACCTCTCTTCTGGGGC
TGCTGCTGGTTCTGCTGCCTGGGGCCAGGGGCTCCCTGGTGTGGCCTCACACCTTCAGCTGCCAGAC
TGCCCGTCAGCACCCCAAGATGCATCTTGCCACAGCACCTCAAACCTGCTGCTCACCTATTGGAGAC
CCCAGCAAGCAGAACTCACTGCTCTGGAGAGCAAACACGGACCGTGCCTTCTCCAGGATGGTTTCTCT
TGAGCAACAATTCTCCTGGTCCCACCAGTGGCATCTACTTCGTCTACTCCCAGTGGTCTTCTCTGG
GAAAGCCTACTCTCCAAGGCCACCTCCTCCCACTCTACTGGCCCATGAGGTCCAGCTTCTCTCTCC
CAGTACCCCTTCATGTGCCTCTCTCAGCTCCCAGAAGATGGTGTATCCAGGGTGCAGGAACCTGGC
TGCACTCGATGTACCACGGGGCTGCGTTCCAGCTCACCCAGGGAGACCAGCTATCCACCCACACAGATGG
CATCCCCACCTAGTCTCAGCCCTAGTACTGTCTTCTTGGAGCCTTCGCTCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC203741 protein sequence
Red=Cloning site Green=Tags(s)

MTPPERLFLPRVRGTTLHLLLLGLLLVLPGAQGLPGVGLTPSAAQTARQHPKMHLAHSTLKPAAHLIGD
PSKQNSLLWRANTDRAFLQDGFSLSNLSLLVPTSGIYFVYSQVVFSGKAYSPKATSSPLYLAHEVQLFSS
QYPFHVPLLSSQKMVYPGLQEPWLHSMYHGAAFQLTQGDQLSTHTDGIPHLVLSPTVFFGFAL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



Chromatograms: https://cdn.origene.com/chromatograms/mk6324_h12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000595

ORF Size: 615 bp

OTI Disclaimer: 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: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.

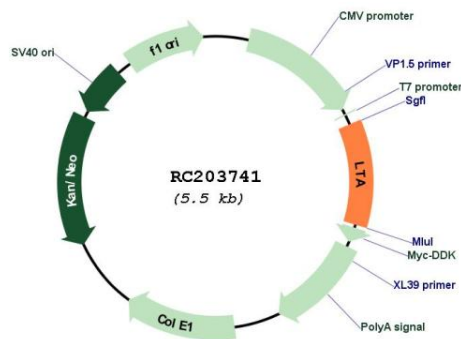
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_000595.4](#)

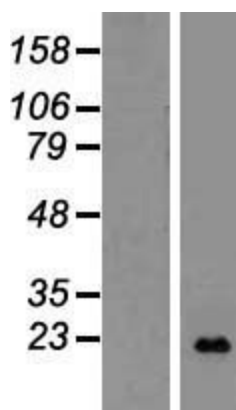
RefSeq Size: 1423 bp

RefSeq ORF:	618 bp
Locus ID:	4049
UniProt ID:	P01374
Cytogenetics:	6p21.33
Protein Families:	Druggable Genome, Secreted Protein, Transmembrane
Protein Pathways:	Antigen processing and presentation, Cytokine-cytokine receptor interaction, Type I diabetes mellitus
MW:	22.3 kDa
Gene Summary:	The encoded protein, a member of the tumor necrosis factor family, is a cytokine produced by lymphocytes. The protein is highly inducible, secreted, and forms heterotrimers with lymphotoxin-beta which anchor lymphotoxin-alpha to the cell surface. This protein also mediates a large variety of inflammatory, immunostimulatory, and antiviral responses, is involved in the formation of secondary lymphoid organs during development and plays a role in apoptosis. Genetic variations in this gene are associated with susceptibility to leprosy type 4, myocardial infarction, non-Hodgkin's lymphoma, and psoriatic arthritis. Alternatively spliced transcript variants have been observed for this gene. [provided by RefSeq, Jul 2012]

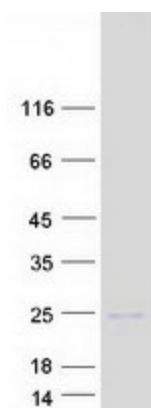
Product images:



Circular map for RC203741



Western blot validation of overexpression lysate (Cat# [LY431786]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC228758] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified LTA protein (Cat# [TP303741]). The protein was produced from HEK293T cells transfected with LTA cDNA clone (Cat# RC203741) using MegaTran 2.0 (Cat# [TT210002]).