

Product datasheet for SC304474

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Lymphocyte Antigen 6 Complex (LY6K) (NM_017527) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Lymphocyte Antigen 6 Complex (LY6K) (NM_017527) Human Untagged Clone

Tag: Tag Free

Symbol: Lymphocyte Antigen 6 Complex Synonyms: CT97; HSJ001348; ly-6K; URLC10

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >SC304474 representing NM_017527.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul

ACCN: NM_017527

Insert Size: 498 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 customercom 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. <u>More info</u>

OTI Annotation:

This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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: <u>NM 017527.3</u>

RefSeq Size: 1747 bp
RefSeq ORF: 498 bp
Locus ID: 54742
UniProt ID: Q17RY6
Cytogenetics: 8q24.3

Protein Families: Transmembrane

MW: 18.7 kDa



Gene Summary:

Required for sperm migration into the oviduct and male fertility by controlling binding of sperm to zona pellucida (By similarity). May play a role in cell growth (PubMed:18089789). [UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) encodes the longest isoform (1). Sequence Note: A downstream translational start codon is selected for this RefSeq based on its better conservation in mammalian species, on a strong Kozak signal, and on the presence of a predicted signal peptide in the protein N-terminus. Studies in PMID:18089789 support the secretion of this protein. An upstream in-frame start codon is also present but has a weaker Kozak signal and is poorly conserved. The use of the upstream start codon would result in a protein that lacks a predicted signal peptide and is 58 aa longer at the N-terminus. Leaky scanning by ribosomes may allow translation initiation at the downstream start codon.