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Product datasheet for SC323616

LCK (NM_005356) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LCK (NM_005356) Human Untagged Clone
Tag:	Tag Free
Symbol:	LCK
Synonyms:	IMD22; LSK; p56lck; pp58lck; YT16
Mammalian Cell Selection:	None
Vector:	pCMV6-XL6
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_005356, the custom clone sequence may differ by one or more nucleotides

ATGGGCTGTGGCTGCAGCTCACACCCGGAAGATGACTGGATGGAAAACATCGATGTGTGTGAGAACTGCC
ATTATCCCATAGTCCCACTGGATGGCAAGGGCACGCTGCTCATCCGAAATGGCTCTGAGGTGCGGGACCC
ACTGGTTACCTACGAAGGCTCCAATCCGCCGGCTTCCCCACTGCAAGACAACCTGGTTATCGCTCTGCAC
AGCTATGAGCCCTCTCACGACGGAGATCTGGGCTTTGAGAAGGGGGAACAGCTCCGCATCCTGGAGCAGA
GCGGCGAGTGGTGGAAGGCGCAGTCCCTGACCACGGGCCAGGAAGGCTTCATCCCCTTCAATTTTGTGGC
CAAAGCGAACAGCCTGGAGCCCGAACCCTGGTTCTTCAAGAACCTGAGCCGCAAGGACGCGGAGCGGCAG
CTCCTGGCGCCCGGGAACACTCACGGCTCCTTCCTCATCCGGGAGAGCGAGAGCACCGCGGGATCGTTTT
CACTGTCGGTCCGGGACTTCGACCAGAACCAGGGAGAGGTGGTGAAACATTACAAGATCCGTAATCTGGA
CAACGGTGGCTTCTACATCTCCCCTCGAATCACTTTTCCCGGCCTGCATGAACTGGTCCGCCATTACACC
AATGCTTCAGATGGGCTGTGCACACGGTTGAGCCGCCCCTGCCAGACCCAGAAGCCCCAGAAGCCGTGGT
GGGAGGACGAGTGGGAGGTTCCCAGGGAGACGCTGAAGCTGGTGGAGCGGCTGGGGGCTGGACAGTTCGG
GGAGGTGTGGATGGGGTACTACAACGGGCACACGAAGGTGGCGGTGAAGAGCCTGAAGCAGGGCAGCATG
TCCCCGGACGCCTTCCTGGCCGAGGCCAACCTCATGAAGCAGCTGCAACACCAGCGGCTGGTTCGGCTCT
ACGCTGTGGTCACCCAGGAGCCCATCTACATCATCACTGAATACATGGAGAATGGGAGTCTAGTGGATTT
TCTCAAGACCCCTTCAGGCATCAAGTTGACCATCAACAAACTCCTGGACATGGCAGCCCAAATTGCAGAA
GGCATGGCATTCATTGAAGAGCGGAATTATATTCATCGTGACCTTCGGGCTGCCAACATTCTGGTGTCTG
ACACCCTGAGCTGCAAGATTGCAGACTTTGGCCTAGCACGCCTCATTGAGGACAACGAGTACACAGCCAG
GGAGGGGGCCAAGTTTCCCATTAAGTGGACAGCGCCAGAAGCCATTAACTACGGGACATTCACCATCAAG
TCAGATGTGTGGTCTTTTGGGATCCTGCTGACGGAAATTGTCACCCACGGCCGCATCCCTTACCCAGGGA
TGACCAACCCGGAGGTGATTCAGAACCTGGAGCGAGGCTACCGCATGGTGCGCCCTGACAACTGTCCAGA
GGAGCTGTACCAACTCATGAGGCTGTGCTGGAAGGAGCGCCCAGAGGACCGGCCCACCTTTGACTACCTG
CGCAGTGTGCTGGAGGACTTCTTCACGGCCACAGAGGGCCAGTACCAGCCTCAGCCTTGA

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5' Read Nucleotide Sequence:

>OriGene 5' read for mutant NM_005356 unedited
CCCGCCCGTCCAGCACTGGGCGGTAGGCGCTGTACGGCTGGGAGGTTCTATATAAGCAGAGCTCGTTTAG
TGAACCGTCAGAATCTTGTAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGCGACGGCGAA
GGGAGCTGAGACTGTCCAGGCAGCCAGGCTAGGCCAGGAGGACCATGTGAATGGGGCCAGAGGGCTCCCG
GGCTGGGCAGGGACCATGGGCTGTGGCTGCAGCTCACACCCGGAAGATGACTGGATGGAAAACATCGATG
TGTGTGAGAACTGCCATTATCCCATAGTCCCACTGGATGGCAAGGCACGCTGCTCATCCGAAATGGCTCT
GAGGTGCGGGGACCCACTTGGTTACCTACCGGAAGGCCTCCCATTTCCGCCCGGCTTTCCCCACTGTGCA
AGGGTGACCCCCAGGCCAGCAGGGGCCTGGAAAAACCAAGGCCCTGCCGGATCCCTGGCCTGGTTGCCCT
CCCCCCCTCTTCCCCCACCCTACTTTTTTCCCCGTTCCTGGCTTTTCTTGTGCCCCCCCCCCCTGGTACC
TCCAAGGCTTCTGCCCCGATCCCAGTCTGGTTTCCCCCGGTACCCCCTTTTGTTTTTCCAAAAAACCTGG
TTTTATCTCTGCACAGCGTTGAAACCCCCTCCCCACAAGAAAATTGGGGGTTTAGAAAAGGGGGAAAAGC
CCGCATTCCCCGGGACGCGAATTTTTTTTTTAAATTTTGTTTGGGGAAACCCCGGGGGGGGGAGCGGATTT
TCCCGACCCCAACCCCCCTGGGGGGGCCTTTATCAACCTTTGGGGGGGCCCCCCTTTTGACAAAAATTTT
AGGCTCCCTTATTTTTCTGAACCCCGGGTTGGGGGGAGCTGGGTTATAGGGGGGTAGGAGGTTTTTTAGA
AGGAGGTCTATACTACTCACTTATCACCCACTCTCCCCACCCTCGTGGTGTCAGAAGGCGATTGGTGGAG
AGCCCTATTTCCCGAGCCCGAAGGTATGCCTTTTATGTTGTGCACAGAGACAATCCGTGTACAGCGACGC
TCTTTTATACAAACGTATCAT

Kinase Domain Sequence:

>SC323616 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI refernce protein database, you can confirm the presence of the kinase-deficient mutation
GATGCWGCGCCTGRTACTGKGRCGGCTGGGGCTGGMAGTTCGGGGAGGTGTGGATGGGGTACTACAACGG
GCACACGAAGGTGGCGGTGATGAGCCTGAAGCAGGGCAGCATGTCCCCGGACGCCTTCCTGGCCGAGGCC
AACCTCATGAAGCAGCTGCAACACCAGCGGCTGGTTCGGCTCTACGCTGKGGTCACCCAGGAGCCCATCT
ACATCATCACTGAATACATGGARAATGGGAGTCTAGTGGATTTTC

Restriction Sites: Please inquire

ACCN: NM_005356

Insert Size: 2740 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." Cell. 2008 May p536-548.

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_005356.2, NP_005347.2
RefSeq Size:	2032 bp
RefSeq ORF:	1530 bp
Locus ID:	3932
UniProt ID:	P06239
Cytogenetics:	1p35.2
Domains:	pkinase, SH2, TyrKc, SH3, S_TKc
Protein Families:	Druggable Genome, Protein Kinase, Stem cell - Pluripotency
Protein Pathways:	Natural killer cell mediated cytotoxicity, Primary immunodeficiency, T cell receptor signaling pathway
Gene Summary:	This gene is a member of the Src family of protein tyrosine kinases (PTKs). The encoded protein is a key signaling molecule in the selection and maturation of developing T-cells. It contains N-terminal sites for myristylation and palmitylation, a PTK domain, and SH2 and SH3 domains which are involved in mediating protein-protein interactions with phosphotyrosine-containing and proline-rich motifs, respectively. The protein localizes to the plasma membrane and pericentrosomal vesicles, and binds to cell surface receptors, including CD4 and CD8, and other signaling molecules. Multiple alternatively spliced variants encoding different isoforms have been described. [provided by RefSeq, Aug 2016] Transcript Variant: This variant (2) is transcribed from the distal type II promoter and contains a distinct 5' UTR compared to variant 1. Variants 1 and 2 encode the same isoform (a).