

Product datasheet for SC300542

LYK5 (STRADA) (NM 001003788) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: LYK5 (STRADA) (NM_001003788) Human Untagged Clone

Tag: Tag Free Symbol: LYK5

Synonyms: LYK5; NY-BR-96; PMSE; Stlk; STRAD; STRAD alpha

Mammalian Cell

Selection:

Neomycin

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

Fully Sequenced ORF: >SC300542 representing NM_001003788.

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

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGAGTAGCTTTCTGCCAGAGGGAGGGTGTTACGAGCTGCTCACTGTGATAGGCAAAGGATTTGAGGAC CTGATGACTGTGAATCTAGCAAGGTACAAACCAACAGGAGGAGTACGTGACTGTACGGAGGATTAACCTA GAAGCTTGTTCCAATGAGATGGTAACATTCTTGCAGGGCGAGCTGCATGTCTCCAAACTCTTCAACCAT TACATCCTGCAGGGGGTGCTGAAGGCCCTCGACTACATCCACCACATGGGATATGTACACAGGAGTGTC AAAGCCAGCCACATCCTGATCTCTGTGGATGGGAAGGTCTACCTGTCTGGTTTGCGCAGCAACCTCAGC ATGATAAGCCATGGGCAGCGAGCGAGTGGTCCACGATTTTCCCAAGTACAGTGTCAAGGTTCTGCCG TGGCTCAGCCCCGAGGTCCTCCAGCAGAATCTCCAGGGTTATGATGCCAAGTCTGACATCTACAGTGTG CTAGAGAAACTGAACGGCACAGTGCCCTGCCTGTTGGATACCAGCACCATCCCCGCTGAGGAGCTGACC ATGAGCCCTTCGCGCTCAGTGGCCAACTCTGGCCTGAGTGACAGCCTGACCACCAGCACCCCCGGCCC TCCAACGGTGACTCGCCCTCCCACCCCTACCACCGAACCTTCTCCCCCCACTTCCACCACTTTGTGGAG CAGATCAAGCGACGTGCCTCAGAGGCTTTGCCCGAATTGCTTCGTCCTGTCACCCCCATCACCAATTTT GAGGGCAGCCAGTCTCAGGACCACAGTGGAATCTTTGGCCTGGTAACAAACCTGGAAGAGCTGGAGGTG GACGATTGGGAGTTCTGA

ACGCGTACGCCGCCCCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul



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LYK5 (STRADA) (NM_001003788) Human Untagged Clone - SC300542

ACCN: NM 001003788

Insert Size: 1122 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 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.

NM 001003788.2 RefSeq:

RefSeq Size: 2338 bp RefSeq ORF: 1122 bp Locus ID: 92335 **UniProt ID:** Q7RTN6

17q23.3 **Protein Families:** Druggable Genome, Protein Kinase

Protein Pathways: mTOR signaling pathway

MW: 41.7 kDa

Cytogenetics:



Gene Summary:

The protein encoded by this gene contains a STE20-like kinase domain, but lacks several residues that are critical for catalytic activity, so it is termed a 'pseudokinase'. The protein forms a heterotrimeric complex with serine/threonine kinase 11 (STK11, also known as LKB1) and the scaffolding protein calcium binding protein 39 (CAB39, also known as MO25). The protein activates STK11 leading to the phosphorylation of both proteins and excluding STK11 from the nucleus. The protein is necessary for STK11-induced G1 cell cycle arrest. A mutation in this gene has been shown to result in polyhydramnios, megalencephaly, and symptomatic epilepsy (PMSE) syndrome. Multiple transcript variants encoding different isoforms have been found for this gene. Additional transcript variants have been described but their full-length nature is not known. [provided by RefSeq, Sep 2009]

Transcript Variant: This variant (4) lacks an alternate in-frame exon in the 5' coding region, compared to variant 1. The resulting isoform (4) lacks an internal segment near the N-terminus, compared to isoform 1.