

## Product datasheet for RC221633

### LYK5 (STRADA) (NM\_001003786) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	LYK5 (STRADA) (NM_001003786) Human Tagged ORF Clone
Tag:	Myc-DDK
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)
ORF Nucleotide Sequence:	>RC221633 representing NM_001003786 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCATTTCTTACCAATGATGCGAGCTCAGAGTCAATAGCATCCTTCTCTAAACAGGAGGTCATGAGTA  
GCTTTCTGCCAGAGGGAGGGTGTACGAGCTGCTCACTGTGATAGGCAAAGGATTTGAGGACCTGATGAC  
TGTGAATCTAGCAAGGTACAACCAACAGGAGGTACGTGACTGTACGGAGGATTAACCTAGAAGCTTGT  
TCCAATGAGATGGTAACATTCTTGCAGGGCGAGCTGCATGTCTCCAAACTCTTCAACCATCCAATATCG  
TGCCATATCGAGCCACTTTTATTGCAGACAATGAGCTGTGGGTTGTCACATCATTTCATGGCATACGGTTC  
TGCAAAAGATCTCATCTGTACACACTTCATGGATGGCATGAATGAGCTGGCGATTGCTTACATCCTGCAG  
GGGGTGCTGAAGGCCCTCGACTACATCCACCACATGGGATATGTACACAGGAGTGTCAAAGCCAGCCACA  
TCCTGATCTCTGTGGATGGGAAGGTCTACCTGTCTGGTTTGCAGCAACCTCAGCATGATAAGCCATGG  
GCAGCGGCAGCGAGTGGTCCACGATTTTCCAAGTACAGTGTCAAGGTTCTGCCGTGGCTCAGCCCCGAG  
GTCCTCCAGCAGAATCTCCAGGGTTATGATGCCAAGTCTGACATCTACAGTGTGGGAATCACAGCCTGTG  
AACTGGCAACGGCCATGTCCCTTTAAGGATATGCCTGCCACCCAGATGCTGCTAGAGAAACTGAACGG  
CACAGTGCCCTGCCTGTTGGATACCAGCACCTCCCGCTGAGGAGCTGACCATGAGCCCTTCGCGCTCA  
GTGGCCAACTCTGGCCTGAGTGACAGCTGACCACCAGCACCCCGCCCTCCAACGGTACTCGCCCT  
CCACCCCTACCACCGAACCTTCTCCCCCACTTCCACCACTTTGTGGAGCAGTGCCTTCAGCGCAACCC  
GGATGCCAGGCCAGTGCAGCACCTCTGAACCACTCTTTCTTCAAGCAGATCAAGCGACGTGCCTCA  
GAGGCTTTGCCGAATTGCTTCTGTCTGTACCCCATCACCAATTTTGAGGGCAGCCAGTCTCAGGACC  
ACAGTGAATCTTTGGCCTGGTAACAACTGGAAGAGCTGGAGGTGGACGATTGGGAGTTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC221633 representing NM\_001003786  
Red=Cloning site Green=Tags(s)

MSFLTNDASSESIASFQEVMSFLPEGGCYELLTVIGKGFEDLMTVNLARYKPTGEYVTVRRINLEAC  
 SNEMVTFLOGELHVSKLFNHPNIVPYRATFIADNELWVVTSMAYGSAKDLICTHFMGMNELAIAYILQ  
 GVLKALDYIHHMGYVHRSVKASHILISVDGKVYLSGLRSNLSMISHGQRQRVVHDFPKYSVKVLPWLSPE  
 VLQQLQGYDAKSDIYSVGITACELANGHVFPKMPATQMLLEKLNQVPCLLDSTIPAEELTMSPSRS  
 VANSGLSDSLTTSRPPSNGDSPSHPYHRTFSPHFHFHVEQCLQRNPDARPSASTLLNHSFFKQIKRRAS  
 EALPELLRPVTPITNFEQSQSDHSGIFGLVTNLEELEVDWFEF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8056\\_h06.zip](https://cdn.origene.com/chromatograms/mk8056_h06.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001003786

**ORF Size:** 1182 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.

**RefSeq:** [NM\\_001003786.3](#)

**RefSeq Size:** 2112 bp

**RefSeq ORF:** 1185 bp

**Locus ID:** 92335

**UniProt ID:** [Q7RTN6](#)

**Cytogenetics:** 17q23.3

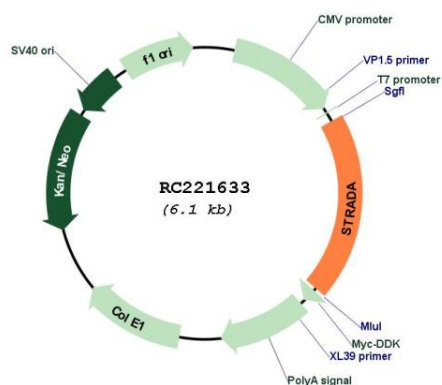
**Protein Families:** Druggable Genome, Protein Kinase

**Protein Pathways:** mTOR signaling pathway

**MW:** 43.8 kDa

**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]

Product images:



Circular map for RC221633