

Product datasheet for **RG221676**

LYK5 (STRADA) (NM_001003787) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LYK5 (STRADA) (NM_001003787) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	LYK5
Synonyms:	LYK5; NY-BR-96; PMSE; Stlk; STRAD; STRAD alpha
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG221676 representing NM_001003787 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCATTTCTTGAAGTAAACCAGAGCGAATCAGGCGGTGGTCTCGGAAAAGTTCATTGTTGAGGGCT
TAAGAGATTTGGAACATTTGGAGAGCAGCCTCCGGGTGACACTCGGAGAAAAACCAATGATGCGAGCTC
AGAGTCAATAGCATCCTTCTCTAAACAGGAGGTCATGAGTAGCTTCTGCCAGAGGGAGGGTGTACGAG
CTGCTCACTGTGATAGGCAAAGGATTTGAGGACCTGATGACTGTGAATCTAGCAAGGTACAAACCAACAG
GAGAGTACGTGACTGTACGGAGGATTAACCTAGAAGCTTGTCCAATGAGATGGTAACATTCTTGCAGGG
CGAGCTGCATGTCTCAAACCTTCAACCATCCCAATATCGTGCCATATCGAGCCACTTTTATTGCAGAG
AATGAGCTGTGGGTTGTACATCATTATGGCATACGGTCTGCAAAAAGATCTCATCTGTACACACTTCA
TGGATGGCATGAATGAGCTGGCGATTGCTTACATCCTGCAGGGGGTGTGAAGGCCCTCGACTACATCCA
CCACATGGGATATGTACACAGGAGTGTCAAAGCCAGCCACATCCTGATCTCTGTGGATGGGAAGGTCTAC
CTGTCTGGTTTGGCAGCAACCTCAGCATGATAAGCCATGGGCAGCGGCAGCGAGTGGTCCACGATTTTC
CCAAGTACAGTGTCAAGGTTCTGCCGTGGCTCAGCCCCGAGGTCCTCCAGCAGAATCTCCAGGGTTATGA
TGCCAAGTCTGACATCTACAGTGTGGGAATCACAGCCTGTGAACCTGGCCAACGGCCATGTCCCCTTAAG
GATATGCCCTGCCACCCAGATGTGCTAGAGAACTGAACGGCACAGTGCCCTGCTGTTGGATACCAGCA
CCATCCCCGCTGAGGAGCTGACCATGAGCCCTTCGCGCTCAGTGCCAACTCTGGCCTGAGTGACAGCCT
GACCACCAGCACCCCGGCCCTCAACGGTGACTCGCCCTCCCACCCCTACCACCGAACCTTCTCCCCC
CACTTCCACCACTTTGTGGAGCAGTGCCTTCAGCGCAACCCGGATGCCAGGCCAGTGCCAGCACCTCC
TGAACCACTCTTCTTCAAGCAGATCAAGCGACGTGCCTCAGAGGCTTTGCCGAATTGCTTCGTCTGT
CACCCCATCACCAATTTGAGGGCAGCCAGTCTCAGGACCACAGTGGAACTTTTGGCCTGGTAACAAAC
CTGGAAGAGCTGGAGGTGGACGATTGGGAGTTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG221676 representing NM_001003787
Red=Cloning site Green=Tags(s)

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MSFLVSKPERIRRWSEKFIVEGLRDLELFGEQPPGDTRRKTNDASSEIASFSKQEVMSFLPEGGCYE
LLTVIGKGFEDLMTVNLARYKPTGEYVTVRRINLEACSNEMVTFMQGELHVSKLFNHPNIVPYRATFIAD
NELWVVT SFMAYGSAKDLICTHFMDGMNELAIAYILQGVKALDYIHHMGYVHRSVKASHILISVDGKVV
LSGLRSNLSMISHGQRQRVVHDFPKYSVKVLPWLSPEVLQQNLQGYDAKSDIYSVGITACELANGHVPFK
DMPATQMLLEKLNQTVPCLLDSTIPAEELTMSPSRSVANSGLSDSLTTSTPRPSNGDSPSHPHYRTFSP
FHFFFVEQCLQRNPDARPSASTLLNHSFFKQIKRRASEALPELLRPVTPITNFEQSQSDHSGIFGLVTN
LEELEVDWDF
```

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001003787

ORF Size: 1293 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_001003787.4](#)

RefSeq Size: 2223 bp

RefSeq ORF: 1296 bp

Locus ID: 92335

UniProt ID: [Q7RTN6](#)

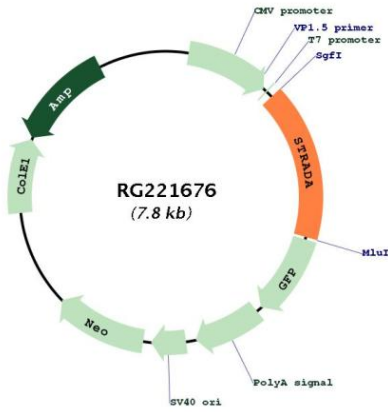
Cytogenetics: 17q23.3

Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: mTOR signaling pathway

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 RG221676