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Product datasheet for RG228248

LYK5 (STRADA) (NM_001165969) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
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:

>RG228248 representing NM_001165969
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCATTTCTTGTAAGTAAACCAGAGCGAATCAGGACCAATGATGCGAGCTCAGAGTCAATAGCATCCT
TCTCTAAACAGGAGGTCATGAGTAGCTTTCTGCCAGAGGGAGGGTGTTACGAGCTGCTCACTGTGATAGG
CAAAGGATTTGAGGACCTGATGACTGTGAATCTAGCAAGGTACAAACCAACAGGAGAGTACGTGACTGTA
CGGAGGATTAACCTAGAAGCTTGTTCCAATGAGATGGTAACATTCTTGCAGGGCGAGCTGCATGTCTCCA
AACTCTTCAACCATCCCAATATCGTGCCATATCGAGCCACTTTTATTGCAGACAATGAGCTGTGGGTTGT
CACATCATTCATGGCATACGGTTCTGCAAAAGATCTCATCTGTACACACTTCATGGATGGCATGAATGAG
CTGGCGATTGCTTACATCCTGCAGGGGGTGCTGAAGGCCCTCGACTACATCCACCACATGGGATATGTAC
ACAGGAGTGTCAAAGCCAGCCACATCCTGATCTCTGTGGATGGGAAGGTCTACCTGTCTGGTTTGCGCAG
CAACCTCAGCATGATAAGCCATGGGCAGCGGCAGCGAGTGGTCCACGATTTTCCCAAGTACAGTGTCAAG
GTTCTGCCGTGGCTCAGCCCCGAGGTCCTCCAGCAGAATCTCCAGGGTTATGATGCCAAGTCTGACATCT
ACAGTGTGGGAATCACAGCCTGTGAACTGGCCAACGGCCATGTCCCCTTTAAGGATATGCCTGCCACCCA
GATGCTGCTAGAGAAACTGAACGGCACAGTGCCCTGCCTGTTGGATACCAGCACCATCCCCGCTGAGGAG
CTGACCATGAGCCCTTCGCGCTCAGTGGCCAACTCTGGCCTGAGTGACAGCCTGACCACCAGCACCCCCC
GGCCCTCCAACGGCCCAGTGCCAGCACCCTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

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Protein Sequence:

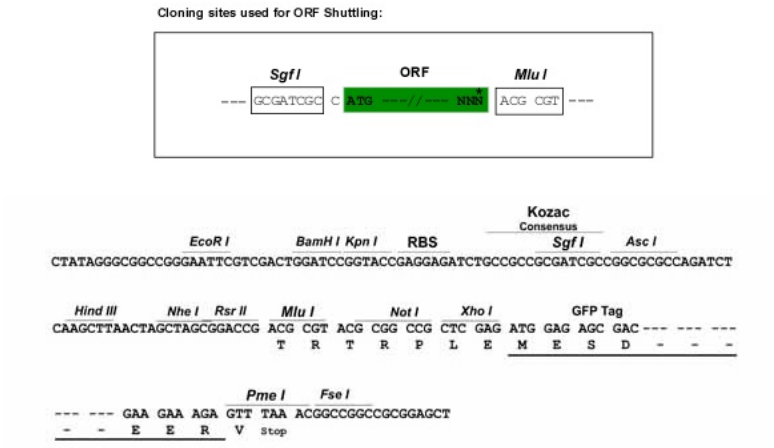
>RG228248 representing NM_001165969
Red=Cloning site Green=Tags(s)

MSFLVSKPERIRTNDASSESIASFSKQEVMSSFLPEGGCYELLTVIGKGFEDLMTVNLARYKPTGEYVTV
RRINLEACSNEMVTFLQGELHVSKLFNHPNIVPYRATFIADNELWVVTSFMAYGSAKDLICTHFMDGMNE
LAIAYILQGVLKALDYIHHMGYVHRSVKASHILISVDGKVYLSGLRSNLSMISHGQRQRVVHDFPKYSVK
VLPWLSPEVLQQNLQGYDAKSDIYSVGITACELANGHVPFKDMPATQMLLEKLNGTVPCLLDTSTIPAEE
LTMSPSRSVANSGLSDSLTTSTPRPSNGPVPAPS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001165969

ORF Size: 942 bp

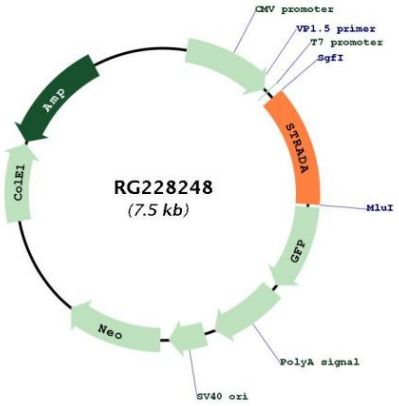
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_001165969.2
RefSeq Size:	2189 bp
RefSeq ORF:	945 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 RG228248