

Product datasheet for **SC323134**

Glycerol kinase (GK) (NM_001128127) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Glycerol kinase (GK) (NM_001128127) Human Untagged Clone
Tag:	Tag Free
Symbol:	GK
Synonyms:	GK1; GKD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

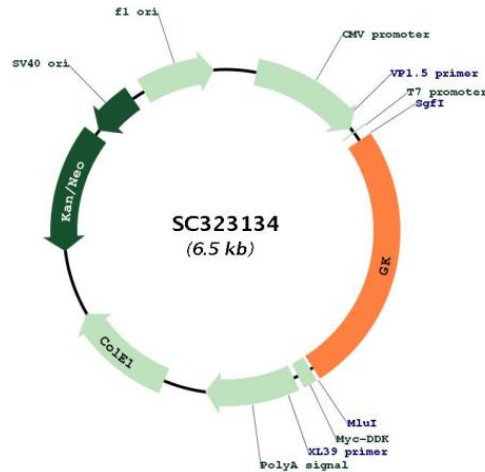


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Fully Sequenced ORF: >SC323134 representing NM_001128127.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCACGATCGCC
ATGGCAGCCTCAAAGAAGGCAGTTTTGGGGCCATTGGTGGGGCGGTGGACCAGGCACCCAGTTCGACG
CGCTTTTTGGTTTTCAATTCAAAAACAGCTGAACACTTAGTCATCATCAAGTAGAAATAAAACAAGAG
TTCCCAAGAGAAGGATGGGTGGAACAGGACCCTAAGGAAATTCTACATTCTGTCTATGAGTGTATAGAG
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CCATAA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites: SgfI-MluI

Plasmid Map:


ACCN: NM_001128127

Insert Size: 1662 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.

RefSeq: [NM_001128127.2](#)

RefSeq Size: 4572 bp

RefSeq ORF: 1662 bp

Locus ID: 2710

UniProt ID: [P32189](#)

Cytogenetics: Xp21.2

Protein Families:	Druggable Genome
Protein Pathways:	Glycerolipid metabolism, Metabolic pathways, PPAR signaling pathway
MW:	60.6 kDa
Gene Summary:	<p>The protein encoded by this gene belongs to the FGGY kinase family. This protein is a key enzyme in the regulation of glycerol uptake and metabolism. It catalyzes the phosphorylation of glycerol by ATP, yielding ADP and glycerol-3-phosphate. Mutations in this gene are associated with glycerol kinase deficiency (GKD). Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2011]</p> <p>Transcript Variant: This variant (3) lacks an in-frame coding exon in the mid-region, and contains an additional in-frame coding exon at the 3' end compared to variant 1. This results in a longer isoform (c) compared to isoform a. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>