

## Product datasheet for **RG209827**

### **LOK (STK10) (NM\_005990) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	LOK (STK10) (NM_005990) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	LOK
Synonyms:	LOK; PRO2729
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG209827 representing NM\_005990  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCTTTTGCCAATTTCCGCCGCATCCTGCGCCTGTCTACCTTCGAGAAGAGAAAGTCCCGCAATATG  
 AGCACGTCGCCCGACCTGGACCCCAACGAGGTGTGGGAGATCGTGGGCGAGCTGGGCGACGGCGCCTT  
 CGGCAAGGTTTACAAGGCCAAGAATAAGGAGACGGGTGCTTTGGTTGCGGCCAAAGTCATTGAAACCAAG  
 AGTGAGGAGGAGCTGGAGGACTACATCGTGGAGATTGAGATCCTGGCCACCTGCGACCACCCTACATTG  
 TGAAGCTCCTGGGAGCCTACTATCACGACGGGAAGCTGTGGATCATGATTGAGTTCTGTCCAGGGGAGC  
 CGTGGACGCCATCATGCTGGAGCTGGACAGAGGCCTCACGGAGCCCAGATACAGGAGGTTTGCCGCCAG  
 ATGCTAGAAGCCCTCAACTTCTGCACAGCAAGAGGATCATCCACCGAGATCTGAAAGCTGGCAACGTGC  
 TGATGACCCTCGAGGGAGACATCAGGCTGGCTGACTTTGGTGTGTCTGCCAAGAATCTGAAGACTCTACA  
 GAAACGAGATTCCTTCATCGGCACGCCCTACTGGATGGCCCCGAGGTGGTCATGTGTGAGACCATGAAA  
 GACACGCCCTACGACTACAAAGCCGACATCTGGTCCCTGGGCATCACGCTGATTGAGATGGCCAGATCG  
 AGCCGCCACACCAGAGCTCAACCCCATGCGGGTCTGTCTAAAGATCGCCAAGTCAGACCCTCCCACGCT  
 GCTCACGCCCTCCAAGTGGTCTGTAGAGTTCCTGACTTCTGAAAGATAGCCCTGGATAAGAACCAGAA  
 ACCCGACCCAGTGCCGCGCAGCTGCTGGAGCATCCCTTCGTGACGAGCATCACCAGTAACAAGGCTCTGC  
 GGGAGCTGGTGGCTGAGGCCAAGGCCGAGGTGATGGAAGGGATCGAAGACGGCCGGGATGAGGGGGAAGA  
 GGAGGACGCCGTGGATGCCGCCCTCACCCCTGGAGAACCATACTCAGAACTCCTCTGAGGTGAGTCCGCCA  
 AGCCTCAATGCTGACAAGCCTCTCGAGGAGTCACCTTCCACCCGCTGGCACCCAGCCAGCTCAGGACA  
 GTGTGAATGAGCCCTGCAGCCAGCCCTCTGGGGACAGATCCCTCAAACCACAGTCCCCAGCTGTGGC  
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 CTCAAAGGCCAGCCAGAGCCGCCCCAACAGCAGCGCCCTGGAGACCTTGGGTGGGAGAAGCTGGCCAA  
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 TGCACCTCTGAGAGCATGGACTATGGTACCAATCTCTCCACTGACCTGTCGCTGAACAAAGAGATGGGCT  
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 TGTGGAGGTGAGCATCACCACCTCAAGATCATCAGCGAAGATGAGAAGAAGGATGAGGAGATGAGATTT  
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 GTAACAAGCATGAGCTGCAGCTGGAGCAAATGCATAAACGTTTTTGAACAGGAAATCAACGCCAAGAAGAA  
 GTTCTTTGACACGGAATTAGAGAACCTGGAGCGTCAGCAAAAGCAGCAAGTGGAGAAGATGGAGCAAGAC  
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 AGGAGCGGAGTGCCTCATGAAGAAGCAGGAGCTCCTTCGAGACCGGGAAGCAGCCCTGTGGGAGATGGA  
 AGAGCACAGCTGCAGGAGAGGCACCAGCTGGTGAAGCAGCAGCTCAAAGACCAGTACTTCTCCAGCGG  
 CACGAGCTGCTGCGCAAGCATGAGAAGGAGCGGGAGCAGATGCAGCGCTACAACCAGCAGCATGATAGAGC  
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 AAGCAGTTCTCCCAGCAGGAGGAGAAGAGGCAGAAAGTCCGAGCGGCTGCAGCAACAGCAGAAACACGAGA  
 ACCAGATGCGGGACATGCTGGCGCAGTGTGAGAGCAACATGAGCGAGCTGCAGCAGCTGCAGAATGAAAA  
 GTGCCACCTCCTGGTAGAGCACGAAACCAGAACTGAAGGCCCTGGATGAGAGCCATAACCAGAACCTG  
 AAGGAATGGCGGACAAGCTTCGGCCGCGCAAGAAGGCTCTGGAAGAGGATCTGAACCAGAAGAAGCGGG  
 AGCAGGAGATGTTCTTCAAGCTGAGCGAGGAGGCGGAGTGCCCAACCCCTCACCCCAAGCAAGGCTGC  
 CAAGTTCTCCCCTACAGTTCTGCGGATGCTTCT

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:** >RG209827 representing NM\_005990  
 Red=Cloning site Green=Tags(s)

MAFANFRIRLRLSTFEKRKSREYEHVRRDLDPNEVWEIVGELGDGAFGKVVYKAKNKETGALVAAKVIETK  
 SEEELEDYIIVEIEILATCDHPYIVKLLGAYYHDGKLWIMIEFCPPGAVDAIMLELDRLGTEPQIQEVCRO  
 MLEALNFLHSKRIIHRDLKAGNVLMTLEGDIRLADFGVSAKNLKTQKRDSFIGTPYWMapevVMCETMK  
 DTPYDYKADIWSLGITLIEMAQIEPPHHELNPMRVLLKIAKSDPPTLLTPSKWSVEFRDFLKIALDKNPE  
 TRPSAAQLLEHPFVSSITSNKALRELVAEAKAEVMEGIEDGRDEGEEEDAVIDAASTLENHTQNSSEVSPP  
 SLNADKPLEESPSTPLAPSQSQDSVNEPCSQPSGDRSLQTTSPVAVPGNENGLAVPVLPRKSRPVSMDA  
 RIQVAQEQVAEQGGDLSPAANRSQKASQSRPNSSALETLGGEKLANGSLEPPAQAAPGSKRSDSCSSL  
 CTSESMYGTNLSTDLSLNKEMGSLSIKDPKLYKKTLKRTRKFVVDGVEVSIITTSKIISEDEKKDEEMRF  
 LRRQELRELRLQKEEHRNQTQLSNKHELQLEQMHRFEQEIINAKKKFFDTELENLERQQKQVEKMEQD  
 HAVRRREEARRIRLEQDRDYTRFQEQKLMKKEVKNEVEKLPRQQRKESMKQKMEEHTQKKQLLDRDFVA  
 KQKEDLELAMKRLTTDNREICDKERECLMKQELLRDREAALWEMEEHQLQERHQLVKQQLKDYFLQR  
 HELLRKHEKEREQMQRYNQRMIEQLKVRQQQEKARLPKIQRSEGKTRMAMYKKSLLHNGGSAEQREKI  
 KQFSQQEERQKSERLQQQKHENQMRDMLAQCESNMSELQQLQNEKCHLLVEHETQKALKALDESHNQNL  
 KEWRDKLRPRKALEEDLNQKKREQEMFFKLSEEAECNPSTPSKAAKFFPYSSADAS

TRTRPLE - GFP Tag - V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

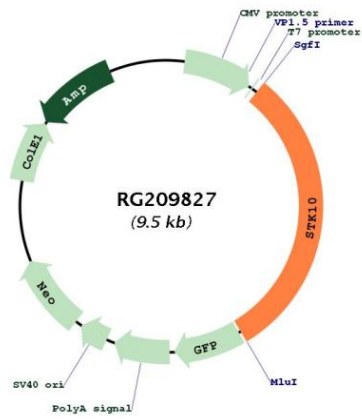


**ACCN:** NM\_005990

**ORF Size:** 2904 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_005990.2</a> , <a href="#">NP_005981.2</a>
<b>RefSeq Size:</b>	4398 bp
<b>RefSeq ORF:</b>	2907 bp
<b>Locus ID:</b>	6793
<b>UniProt ID:</b>	<a href="#">O94804</a>
<b>Cytogenetics:</b>	5q35.1
<b>Domains:</b>	pkinase, TyrKc, S_TKc
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Gene Summary:</b>	This gene encodes a member of the Ste20 family of serine/threonine protein kinases, and is similar to several known polo-like kinase kinases. The protein can associate with and phosphorylate polo-like kinase 1, and overexpression of a kinase-dead version of the protein interferes with normal cell cycle progression. The kinase can also negatively regulate interleukin 2 expression in T-cells via the mitogen activated protein kinase kinase 1 pathway. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG209827