

## Product datasheet for **RG206782**

### **AK3L1 (AK4) (NM\_203464) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** AK3L1 (AK4) (NM\_203464) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** AK4  
**Synonyms:** AK3; AK3L1; AK3L2; AK 4  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG206782 representing NM\_203464  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCTTCCAACCTCTGCGCGGGTCATCCTCGGGCCGCCGGCTCGGGCAAGGGCACCCTGAGCCAGA  
GGATCGCCAGAACTTTGGTCTCCAGCATCTCTCCAGCGGCCACTTCTTGC GGAGAACATCAAGGCCAG  
CACCGAAGTTGGTGAGATGGCAAAGCAGTATATAGAGAAAAGTCTTTTGGTTCCAGACCATGTGATCACA  
CGCCTAATGATGTCCGAGTTGGAGAACAGGCGTGGCCAGCACTGGCTCCTTGATGGTTTTCTAGGACAT  
TAGGACAAGCCGAAGCCCTGGACAAAATCTGTGAAGTGGATCTAGTGATCAGTTTGAATATCCATTGA  
AACACTTAAAGATCGTCTCAGCCGCCGTTGGATTCACCCTCCTAGCGGAAGGGTATATAACCTGGACTTC  
AATCCACCTCATGTACATGGTATTGATGACGTCCTGGTGAACCGTTAGTCCAGCAGGAGGATGATAAAC  
CCGAAGCAGTTGCTGCCAGGCTAAGACAGTACAAAGACGTGGCAAAGCCAGTCATTGAATTATACAAGAG  
CCGAGGAGTGCTCCACCAATTTCCGGAACGGAGACGAACAAAATCTGGCCCTACGTTTACACACTTTTC  
TCAAACAAGATCACACCTATTTCAGTCCAAAGAAGCATAT

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA



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**Protein Sequence:** >RG206782 representing NM\_203464  
 Red=Cloning site Green=Tags(s)

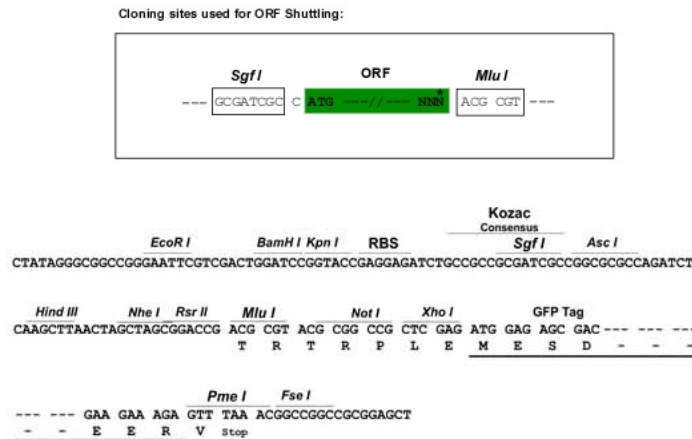
MASKLLRAVILGPPGSGKGTVSQRIAQNFLQLHSSGHFLRENKASTVEGEMAKQYIEKSLLPDQHVIT  
 RLMMSLENNRRGQHWLLDGFPRTLGQAEALDKICEVDLVISLNIPFETLKDRLSRRWIHPPSGRVYNLDF  
 NPPHVHGIDDDVTGEPLVQQEDDKPEAVAARLRQYKDVAKPVIELYKSRGVLHQFSGTETNKIWPYVYTLF  
 SNKITPIQSKEAY

TRTRPLE - GFP Tag - V

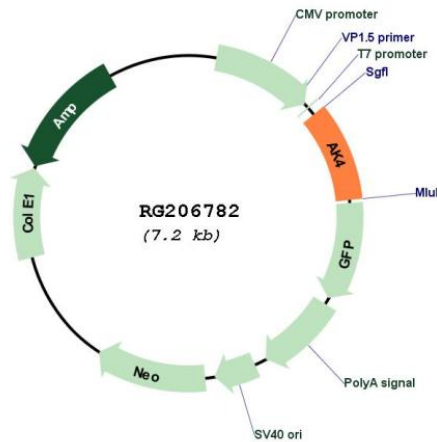
**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_203464

**ORF Size:** 669 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_203464.1</a> , <a href="#">NP_982289.1</a>
<b>RefSeq Size:</b>	2241 bp
<b>RefSeq ORF:</b>	672 bp
<b>Locus ID:</b>	205
<b>UniProt ID:</b>	<a href="#">P27144</a>
<b>Cytogenetics:</b>	1p31.3
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Metabolic pathways, Purine metabolism
<b>Gene Summary:</b>	This gene encodes a member of the adenylate kinase family of enzymes. The encoded protein is localized to the mitochondrial matrix. Adenylate kinases regulate the adenine and guanine nucleotide compositions within a cell by catalyzing the reversible transfer of phosphate group among these nucleotides. Five isozymes of adenylate kinase have been identified in vertebrates. Expression of these isozymes is tissue-specific and developmentally regulated. A pseudogene for this gene has been located on chromosome 17. Three transcript variants encoding the same protein have been identified for this gene. Sequence alignment suggests that the gene defined by NM_013410, NM_203464, and NM_001005353 is located on chromosome 1. [provided by RefSeq, Jul 2008]