

## Product datasheet for **RC234093**

### GFAP (NM\_001242376) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** GFAP (NM\_001242376) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** GFAP  
**Synonyms:** ALXDRD  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RC234093 representing NM\_001242376  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAGAGGAGACGCATCACCTCCGCTGCTCGCCGCTCCTACGTCTCCTCAGGGGAGATGATGGTGGGG  
 GCCTGGCTCCTGGCCGCGTCTGGTCTGGCACCCGCTCTCCCTGGCTCGAATGCCCCCTCCACTCCC  
 GACCCGGTGGATTTCTCCCTGGCTGGGGCACTCAATGCTGGCTTCAAGGAGACCCGGGCCAGTGAGCGG  
 GCAGAGATGATGGAGCTCAATGACCGCTTTGCCAGCTACATCGAGAAGGTTTCGTTCTTGAACAGCAAA  
 ACAAGGCGCTGGCTGCTGAGCTGAACGCTGCGGGCCAAGGAGCCCAAGCTGGCAGACGTCTACCA  
 GGCTGAGCTGCGAGAGCTGCGGCTGCGGCTCGATCAACTCACCGCCAACAGCGCCCGGCTGGAGGTTGAG  
 AGGGACAATCTGGCACAGGACCTGGCCACTGTGAGGCAGAAGCTCCAGGATGAAACCAACCTGAGGCTGG  
 AAGCCGAGAACAACCTGGCTGCCATAGACAGGAAGCAGATGAAGCCACCCTGGCCCGTCTGGATCTGGA  
 GAGGAAGATTGATCGCTGGAGGAGGAGATCCGGTTCTTGAGGAAGATCCACGAGGAGGAGGTTCCGGAA  
 CTCCAGGAGCAGCTGGCCCGACAGCAGGTCCATGTGGAGCTTGACGTGGCCAAGCCAGACCTCACCGCAG  
 CCCTGAAAGAGATCCGCACGCAGTATGAGGCAATGGCGTCCAGCAACATGCATGAAGCCGAAGATGGTA  
 CCGCTCCAAGTTTGCAGACCTGACAGACGCTGCTGCCCGCAACCGGAGCTGCTCCGCCAGGCCAAGCAC  
 GAAGCCAACGACTACCGCGCCAGTTGACGCTTGCACCTGCGACCTGGAGTCTCTGCGCGGCACGAACG  
 AGTCCCTGGAGAGGCAGATGCGCGAGCAGGAGGAGCGGCAGTGCAGGAGGCGGCCAGTTATCAGGAGGC  
 GCTGGCGCGGCTGGAGGAAGAGGGGCAGAGCCTCAAGGACGAGATGGCCCGCACTTGCAGGAGTACCAG  
 GACCTGCTCAATGTCAAGCTGGCCCTGGACATCGAGATCGCCACCTACAGGAAGCTGCTAGAGGGCGAGG  
 AGAACCGGATCACCATTCCCGTGCAGACCTTCTCAACCTGCAGATTCGAGGTCAGTACAGCAGGGCCTC  
 GTGGGAAGGGCACTGGAGTCTGCCCTCCTCCAGGGCCTGTAGGTTGCTCCAGACTGGGACTGAGGAT  
 CAGGGCAAGGGATCCAGCTCTCCCTGGGGCCTTCGTGACACTGCAGCGCTCC

**ACGCGT**ACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA



**Protein Sequence:** >RC234093 representing NM\_001242376  
Red=Cloning site Green=Tags(s)

MERRRITSAARRSYVSSGEMMVGGLAPGRRLPGGTRLSLARMPPPLPTRVDFSLAGALNAGFKETRASER  
 AEMMELNDRFASYIEKVRFLQQNKALAEELNQLRAKEPTKLADVYQAELELRLRLDQLTANSARLEVE  
 RDNLAQDLATVRQKLQDETNLRLLEAENLAAAYRQEADEATLARLDLKERKIESLLEEEIRFLRKIHEEEVRE  
 LQEQLARQQVHVELDVAKPDLTAALKEIRTQYEAAMASSNMHEAEWYRSKFADLTDAARNAELLRQAKH  
 EANDYRRQLQSLTCDLESLRGTNESLERQMRQEERHVREAASYQEALARLEEEGQSLKDEMARHLQEYQ  
 DLLNVKLALDIEIATYRKLLLEGEENRITIPVQTFSNLQIRGQYSRASWEHGWSPAPSSRACRLQLQTGED  
 QGKGIQLSLGAFVTLQRS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

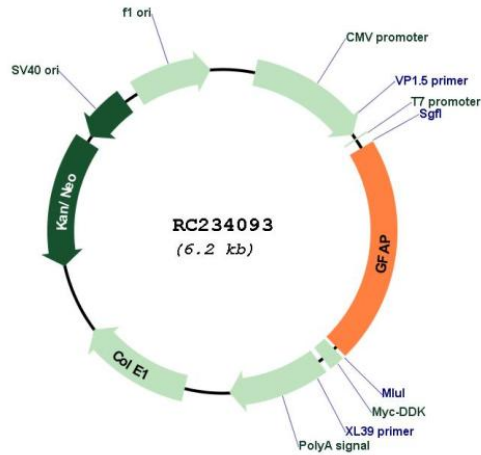
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001242376

<b>ORF Size:</b>	1314 bp
<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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></p>
<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_001242376.3</a>
<b>RefSeq Size:</b>	2193 bp
<b>RefSeq ORF:</b>	1317 bp
<b>Locus ID:</b>	2670
<b>UniProt ID:</b>	<a href="#">P14136</a>
<b>Cytogenetics:</b>	17q21.31
<b>Protein Families:</b>	ES Cell Differentiation/IPS
<b>MW:</b>	50.7 kDa
<b>Gene Summary:</b>	<p>This gene encodes one of the major intermediate filament proteins of mature astrocytes. It is used as a marker to distinguish astrocytes from other glial cells during development. Mutations in this gene cause Alexander disease, a rare disorder of astrocytes in the central nervous system. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Oct 2008]</p>