

Product datasheet for **RG221584**

AK7 (NM_152327) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AK7 (NM_152327) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	AK7
Synonyms:	AK 7; CFAP75; FAP75; SPGF27
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG221584 representing NM_152327
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTGAAGAAGAGGAAACTGCTGCTCTCACGGAGAAGTTATCCGGACCCAGAGGGTGTTTATAAAC
 TGTTGGATTCTACAGCAGCGGAAACATCGGGAAGTTTCTATCTAACTGTGTAGTTGGGGCTTCGCTTGA
 AGAAATTACAGAGGAAGAGGAAGAGGAAGTAAAATAAGTCAGCTATGCTGGAAGCTTCTCAACCAAAA
 GTGAAGGAAGGCACATTCAGATTGTGGGCACGCTGTCCAAGCCTGACAGCCCAGCGGCTGACTTTGCGG
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 AGCCACTTTGAAAAGCGAAAGCTATTTATTTACTGTGCGCGGTGATGACTTGGGCGCGCTCCAAAGCCC
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 TCTGGACCACATAAATGTGAAAAAATGGTTCTCAAATTTGAAAAAAGCCAGAAAATTTGAGCAGTAC
 GTAGTTGCTGCTGGACTCCAGTATGGAGCGGAAGGAGGCATGTTACACACATTTTTAAGATGGCTTGGT
 TGGCGGAGATTCCTGCATTACCAGTTTTGGCGATGGAACAAATGTAATTCACCAATCCATGTTCTTGA
 TCTAGCAGGAGTGATACAAAACGTCATAGATCACGTGCCAAAGCCTCACTACCTGGTTGCTGTGGATGAG
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 GTCCCCCTGCTGTGGGAAAATCCAGTATTGCTAAAGAATTGGCCAACTACTACAAACTGCATCACATCCA
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 CGGGACATCAATATCGACGATGAGACTGTCTTCAACTATTTTGATGAACTTGAAATTCACCCGATACATA
 TTGATGTAGGAAAATCTGAAGATGCTCAGAATAGACTTGTATCAAACAGCTCATCAAAGAGATTGGGGA
 GCCTCGAAATTATGGTTAACAGACGAAGAAAAGGCAGAAAGAGGAGCGGAAGGCTGCGGAGGAGCGGCTG
 GCCAGGGAGGCTGCTGAGGAAGCAGAACCGGAGCACCAGGAGGCCGTGGAGATGGCAGAGAAGATAGCTC
 GCTGGGAGGAGTGAATAAACGACTGGAGGAAGTAAAAGAGAAGAAAGAGAATTACTGGAGGCTCAGTC
 AATTCCTGAGAAAATTTAATGACCTATGTGATGCCAATCTTATTCAGGGCCTGAATGAATGTTGC
 AACGTCGACCCGAAGACCCTGTTGATTTCTGGCAGAATATCTTCAAGAACAATCCTGAAGCACAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG221584 representing NM_152327
Red=Cloning site Green=Tags(s)

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MAEEEEETAALTEKVIRTQRVFINLLDSYSSGNIGKFLSNCVVGASLEEITEEEEEEDENKSAMLEASSTK
VKEGTFQIVGTL SKPDSRPDPF AVETYS AISREDLLMRLLECDV I IYNI TESSQQMEEAIWAVSALSEEV
SHFEKRKLF ILLSTVMTWARSKALDPEDSEVPF TEEDYRRRKSHPNFLDHINA EKMLVLFKFKKARKFAAY
VVAAGLQYGAEGMLHTFFKMAWLGEIPALPVFGDGTNVIPTIHVLDLAGVIQNVIDHVPKPHYLVAVDE
SVHTLEDIVKCI SKNTGPGKIQKIPRENAYLTKDLTQDCLDHL L VNLRMEALFVKENFNIRWAAQTGFVE
NINTILKEYKQSRGLMPIKICILGPPAVGKSSIAKELANYK LHHIQLKDVISEIAI KLEAIVAPNDVGE
GEEEEEEEEENVEDAQELLDGIKESMEQNAGQLDDQYIIRFMKEK LKSMPCRNGYILDGFPKTYDQA
KDLFNQEDEEEEDDVRGRMFPFDKLI IPEFVCALDASDEF LKERVINLPESIVAGTHYSQDRFLRALSNY
RDINIDDETVFN YFDELEIHP IHI DVGKLEDAQNRLAIKQLIKEIGEP RNYGLTDEEKAEERKAAEERL
AREAAAAEAERHQEAVEMA EK IARWEEWNKRLEEVKREERELLEAQSIPLRNYLMTYVMP TLIQGLNECC
NVRPEDPVDFLAEYLFKN NPEAQ
    
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_152327

ORF Size: 2169 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.

RefSeq: [NM_152327.5](#)

RefSeq Size: 3318 bp

RefSeq ORF: 2172 bp

Locus ID: 122481

UniProt ID: [Q96M32](#)

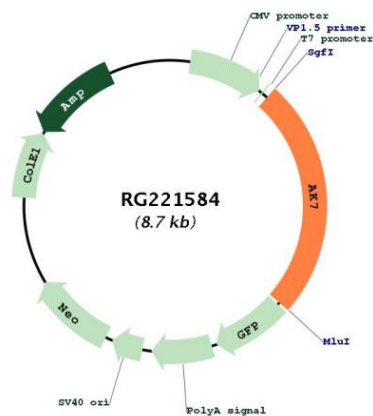
Cytogenetics: 14q32.2

Protein Families: Druggable Genome

Protein Pathways: Metabolic pathways, Purine metabolism

Gene Summary: This gene encodes a member of the adenylate kinase family of enzymes. The encoded enzyme is a phosphotransferase that catalyzes the reversible phosphorylation of adenine nucleotides. This enzyme plays a role in energy homeostasis of the cell. Alternative splicing results in multiple transcript variants. Mutations in the mouse gene are associated with primary ciliary dyskinesia. [provided by RefSeq, Apr 2017]

Product images:



Circular map for RG221584