

## Product datasheet for **RC203554**

### Ketosamine 3 kinase (FN3KRP) (NM\_024619) Human Tagged ORF Clone

#### Product data:

Product Type: Expression Plasmids

Tag: Myc-DDK

Symbol: Ketosamine 3 kinase

Synonyms: FN3KL

Mammalian Cell Selection: Neomycin

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

ORF Nucleotide Sequence: >RC203554 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGGAGCTGCTGAGGCGCGAGCTGGGCTGCAGCTCTGTCAAGGCCACGGGCCACTCGGGGGCGGGT  
GCATCAGCCAGGGCCGGAGCTACGACACGGATCAAGGACGAGTGTTCTGTAAAGTGAACCCCAAGGCGGA  
GGCCAGAAGAATGTTTGAAGGTGAGATGGCAAGTTAACTGCCATCCTGAAAACAAACACGGTAAAAGTG  
CCCAAGCCCATCAAGTTCTGGATGCCCCAGGCGGGGAGCGTGCTGGTGATGGAGCACATGGACATGA  
GGCATCTGAGCAGTCATGCTGCAAAGCTTGGAGCCAGCTGGCCGATTTACACCTTGATAACAAGAAGT  
TGGAGAGATGCGCCTGAAGGAGGCGGGCACAGTGGGGAGAGGAGTGGGCAGGAGGAACGGCCCTTTGTG  
GCCCCGTTTGGATTTGACGTGGTGACGTGCTGTGGATACCTCCCCAGGTGAATGACTGGCAGGAGGACT  
GGTCTGTGTTCTATGCCCGGCAGCGCATTAGCCCCAGATGGACATGGTGGAGAAGGAGTCTGGGGACAG  
GGAGGCCCTCCAGCTTTGGTCTGCTCTGCAGTTAAAGATCCCTGACCTGTTCCGTGACCTGGAGATCATC  
CCAGCCTTACTCCAGGGGACCTCTGGGGTGGAAACGTAGCAGAGGATTCCTCTGGGCCGGTGATTTTGTG  
ACCCAGCTTCTTCTACGGCCACTCGGAATATGAGCTGGCAATAGCTGGCATGTTTGGGGCTTTAGCAG  
CTCCTTTTACTCCGCCTACCACGGCAAAATCCCCAAGGCCCCAGGATTCGAGAAGCGCCTTCAGTTGTAT  
CAGCTCTTCACTACTTGAACCACTGGAATCATTTTGGATCGGGGTACAGAGGATCCTCCCTGAACATCA  
TGAGGAATCTGGTCAAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC203554 protein sequence  
 Red=Cloning site Green=Tags(s)

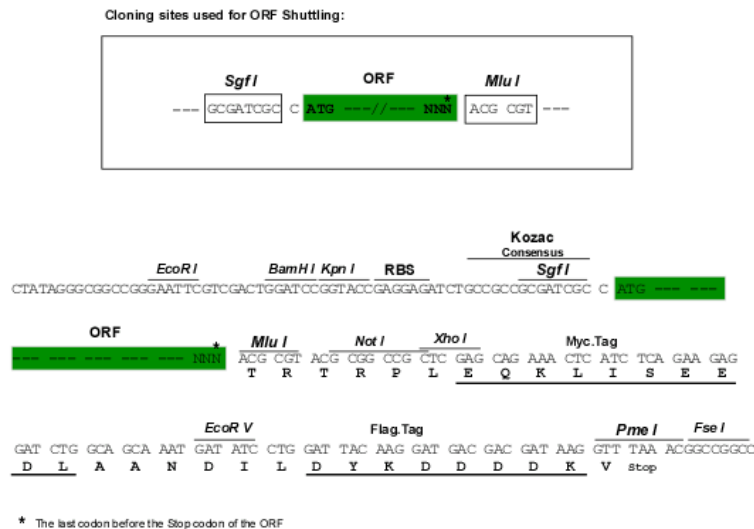
MEELLRRELGCSSVRATGHSGGGCISQGRSYDQGRVFKVNPKEARRMFEGEMASLTAILKTNTVKV  
 PKPIKVLDAPEGGSVLVMEHMDMRHLSSHAAKLGAQLADLHLDNKKLGEMRLKEAGTVGRGGGQEERPFV  
 ARFGFDVVTCCGYLPQVNDWQEDWVVFYARQRIQPMQDMVEKESGDREALQLWSALQLKIPDLFRDLEII  
 PALLHGDLWGGNVAEDSSGPVIFDPASFYGHSEYELAIAGMFGGFSSTFYSAHYGKIPKAPGFEKRLQLY  
 QLFHYLNHNHFGSGYRGSSLNIMRNLVK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6078\\_c04.zip](https://cdn.origene.com/chromatograms/mk6078_c04.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_024619

**ORF Size:** 927 bp

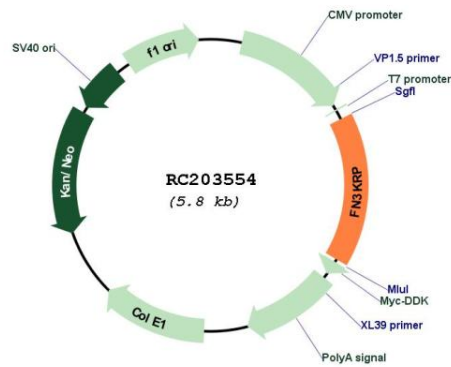
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

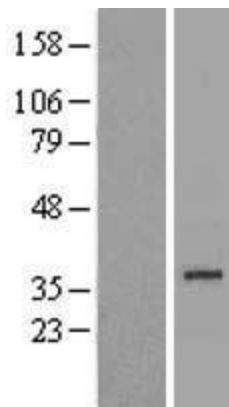
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<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>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<u>NM_024619.3</u>
<b>RefSeq Size:</b>	1844 bp
<b>RefSeq ORF:</b>	930 bp
<b>Locus ID:</b>	79672
<b>UniProt ID:</b>	<u>Q9HA64</u>
<b>Cytogenetics:</b>	17q25.3
<b>Protein Families:</b>	Druggable Genome
<b>MW:</b>	34.4 kDa
<b>Gene Summary:</b>	<p>A high concentration of glucose can result in non-enzymatic oxidation of proteins by reaction of glucose and lysine residues (glycation). Proteins modified in this way are less active or functional. This gene encodes an enzyme which catalyzes the phosphorylation of psicosamines and ribulosamines compared to the neighboring gene which encodes a highly similar enzyme, fructosamine-3-kinase, which has different substrate specificity. The activity of both enzymes may result in deglycation of proteins to restore their function. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2012]</p>

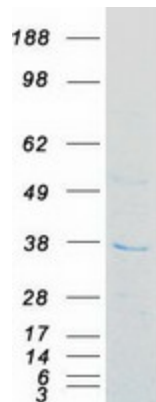
## Product images:



Circular map for RC203554



Western blot validation of overexpression lysate (Cat# [LY411188]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203554 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FN3KRP protein (Cat# [TP303554]). The protein was produced from HEK293T cells transfected with FN3KRP cDNA clone (Cat# RC203554) using MegaTran 2.0 (Cat# [TT210002]).