

Product datasheet for **RC200388**

Fumarylacetoacetate hydrolase (FAH) (NM_000137) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Fumarylacetoacetate hydrolase (FAH) (NM_000137) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Fumarylacetoacetate hydrolase
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200388 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCTTCATCCCGGTGGCCGAGGATCCGACTTCCCCATCCACAACCTGCCCTACGGCGTCTTCTCGA
CCAGAGGGCAGCCCAAGACCGAGGATAGGTGTGGCCATTGGCGACCAGATCCTGGACCTCAGCATCATCAA
GCACCTCTTTACTGGTCTGTCTCTCCAAACACCAGGATGTCTTCAATCAGCCTACACTCAACAGCTTC
ATGGGCCTGGGTGAGCTGCCTGGAAGGAGCGGAGAGTGTCTTGCAGAACTTGCTGTCTGTGAGCCAAG
CCAGGCTCAGAGATGACACCGAACTTCGGAAGTGTGCATTCATCTCCAGGCTTCTGCCAGCATGCACCT
TCCAGCCACCATAGGAGACTACACAGACTTCTATTCTCTCGGCAGCATGCTACCAACGTCGGAATCATG
TTCAGGGACAAGGAGAATGCGTTGATGCCAAATTGGCTGCACTTACCAGTGGGCTACCATGGCCGTGCCT
CCTCTGTCTGGTGTCTGGCACCCCAATCCGAAGGCCCATGGGACAGATGAAACCTGATGACTCTAAGCC
TCCCGTATATGGTGCCTGCAAGCTCTTGGACATGGAGCTGGAAATGGCTTTTTTTGTAGGCCCTGGAAAC
AGATTGGGAGAGCCGATCCCAATTTCCAAGGCCCATGAGCACATTTTGGAAATGGTCTTATGAACGACT
GGAGTGCACGAGACATTCAGAAGTGGGAGTATGTCCCTCTCGGGCCATTCCTTGGGAAGAGTTTTGGGAC
CACTGTCTCTCCGTGGTGGTGGCCATGGATGCTCTCATGCCCTTGTGTGCCAACCCGAAGCAGGAC
CCCAGGCCCTGCCGTATCTGTGCCATGACGAGCCCTACACATTTGACATCAACCTCTCTGTTAACCTGA
AAGGAGAAGGAATGAGCCAGGCGCTACCATATGCAAGTCCAATTTAAGTACATGACTGGACGATGCT
GCAGCAGCTCACTCAACTCTGTCAACGGCTGCAACCTGCGGCCGGGGACCTCCTGGCTTCTGGGACC
ATCAGCGGGCCGGAGCCAGAAAACCTCGGCTCCATGTTGGAAGTGTGCTGGAAGGGAACGAAGCCCATAG
ACCTGGGGAAATGGTCAAGCAGGAAGTTTCTGTGGACGGGGATGAAGTCATCAACAGGGTACTGCCA
GGGGATGTTACCGCATCGGCTTTGGCCAGTGTGCTGGAAGTGTGCTGCTCTCTCTGCCATCA

ACGCGTACGCGGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC200388 protein sequence
Red=Cloning site Green=Tags(s)

```
MSFIPVAEDSDFPIHNLPGYVFSTRGDPRPRIGVAIGDQILDLSIIKHLFTGPVLSKHQDVFNQPTLNSF
MGLGQAAWKEARVFLQNLISVSQARLRDDTELKCAFISQASATMHLPATIGDYDFYSSRQHATNVGIM
FRDKENALMPNWLHLPVGYHGRASSVVVSGTPIRRPMGQMKPDDSKPPVYGACKLLDMELEMAFFVGPNG
RLGEPPIISKAHEHIFGMVLMNDWSARDIQKWEYVPLGPFLGKSF GTTVSPWVVPMDALMPFAVNPQD
PRPLPYLCHDEPYTFDINLSVNLKGEQMSQAATICKSNFKYMYWTMLQQLTHHSVNGCNLRPGDLLASGT
ISGPEPENFGSMLELSWKGTKPIDLGNQTRKFLLDGDEVIITGYCQGDGYRIGFGQCAGKVL PALLPS
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6065_f10.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_000137

ORF Size: 1257 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_000137.4](#)

RefSeq Size: 1810 bp

RefSeq ORF: 1260 bp

Locus ID: 2184

UniProt ID: [P16930](#)

Cytogenetics: 15q25.1

Domains: FAA_hydrolase

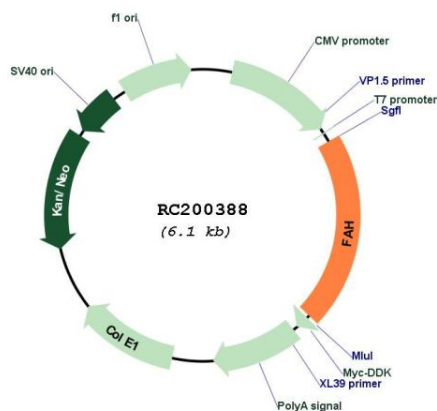
Protein Families: Druggable Genome

Protein Pathways: Metabolic pathways, Tyrosine metabolism

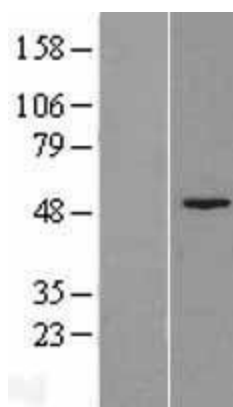
MW: 46.4 kDa

Gene Summary: This gene encodes the last enzyme in the tyrosine catabolism pathway. FAH deficiency is associated with Type 1 hereditary tyrosinemia (HT). [provided by RefSeq, Jul 2008]

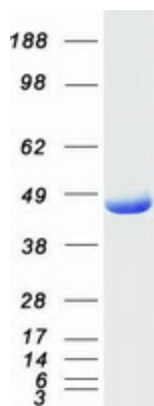
Product images:



Circular map for RC200388



Western blot validation of overexpression lysate (Cat# [LY400047]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200388 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FAH protein (Cat# [TP300388]). The protein was produced from HEK293T cells transfected with FAH cDNA clone (Cat# RC200388) using MegaTran 2.0 (Cat# [TT210002]).