

Product datasheet for **RC401074**

Epoxide hydrolase (EPHX1) (NM_000120) Human Mutant ORF Clone

Product data:

Product Type:	Mutant ORF Clones
Product Name:	Epoxide hydrolase (EPHX1) (NM_000120) Human Mutant ORF Clone
Mutation Description:	W97X
Affected Codon#:	97
Affected NT#:	290
Nucleotide Mutation:	EPHX1 Mutant (W97X), Myc-DDK-tagged ORF clone of Homo sapiens epoxide hydrolase 1, microsomal (xenobiotic) (EPHX1), transcript variant 1 as transfection-ready DNA
Effect:	Poenil proein defiieny
Symbol:	EPHX1
Synonyms:	EPHX; EPOX; HYL1; MEH
E. coli Selection:	Kanamycin (25 ug/mL)
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
Tag:	Myc-DDK
ACCN:	NM_000120
ORF Size:	288 bp
Restriction Sites:	Sgfl-Mlul



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ORF Nucleotide Sequence:

>RC401074 representing NM_000120
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTGGCTAGAAATCCTCCTCACTTCAGTGCTGGGCTTTGCCATCTACTGGTTCACTC**CCGGGACAAAG**
 AGGAAACTTTGCCACTTGAAGATGGGTGGTGGGGCCAGGCACGAGGTCCGCAGCCAGGGAGGACGACAG
 CATCCGCCCTTTCAAGGTGAAACGTCAGATGAGGAGATCCACGACTTACACCAGAGGATCGATAAGTTC
 CGTTTACCCACCTTTGGAGGACAGCTGCTTCCACTATGGTTCAACTCAACTACCTGAAGAAAGTCA
 TCTCTAC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGA TAAGGTTTAA

Protein Sequence:

>RC401074 representing NM_000120
 Red=Cloning site Green=Tags(s)

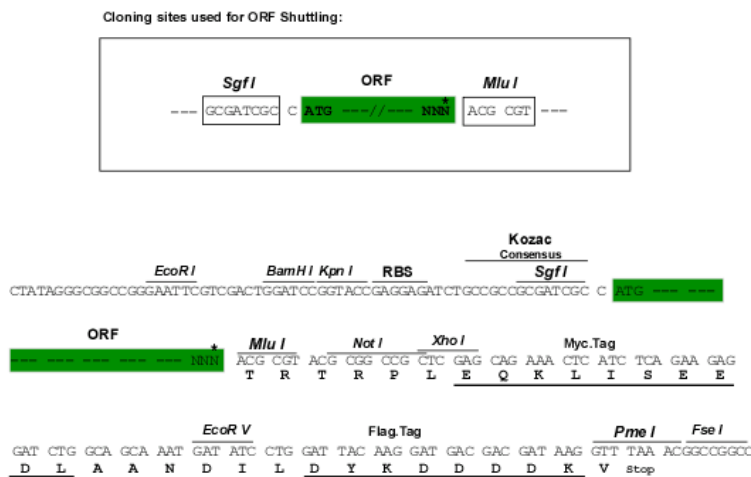
MWLEILLTSLVGFAYWFISRDKETLPLEDGWWPGTRSAAREDDSIKPFKETSDEEIHDLHQRIDKF
 RFTPPLEDSCFHYGFNSNYLKKVISY

SGPTRRRLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfi-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

OTI Disclaimer: 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 custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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).

RefSeq: [NP_000111](#)

RefSeq Size: 288 bp

RefSeq ORF: 1368 bp

Locus ID: 2052

Cytogenetics: 1q42.12

Domains: abhydrolase

Protein Families: Druggable Genome, Protease

Protein Pathways: Metabolism of xenobiotics by cytochrome P450

MW: 10.6 kDa

Gene Summary: Epoxide hydrolase is a critical biotransformation enzyme that converts epoxides from the degradation of aromatic compounds to trans-dihydrodiols which can be conjugated and excreted from the body. Epoxide hydrolase functions in both the activation and detoxification of epoxides. Mutations in this gene cause preeclampsia, epoxide hydrolase deficiency or increased epoxide hydrolase activity. Alternatively spliced transcript variants encoding the same protein have been found for this gene.[provided by RefSeq, Dec 2008]