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Product datasheet for RC227627

Epoxide hydrolase (EPHX1) (NM_001136018) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Epoxide hydrolase (EPHX1) (NM_001136018) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Epoxide hydrolase
Synonyms:	EPHX; EPOX; HYL1; MEH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC227627 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTGGCTAGAAATCCTCCTCACTTCAGTGCTGGGCTTTGCCATCTACTGGTTCATCTCCCGGGACAAAG
AGGAAACTTTGCCACTTGAAGATGGGTGGTGGGGGCCAGGCACGAGGTCCGCAGCCAGGGAGGACGACAG
CATCCGCCCTTTCAAGGTGGAAACGTCAGATGAGGAGATCCACGACTTACACCAGAGGATCGATAAGTTC
CGTTTCACCCCACCTTTGGAGGACAGCTGCTTCCACTATGGCTTCAACTCCAACTACCTGAAGAAAGTCA
TCTCCTACTGGCGGAATGAATTTGACTGGAAGAAGCAGGTGGAGATTCTCAACAGATACCCTCACTTCAA
GACTAAGATTGAAGGGCTGGACATCCACTTCATCCACGTGAAGCCCCCCCAGCTGCCCGCAGGCCATACC
CCGAAGCCCTTGCTGATGGTGCACGGCTGGCCCGGCTCTTTCTACGAGTTTTATAAGATCATCCCACTCC
TGACTGACCCCAAGAACCATGGCCTGAGCGATGAGCACGTTTTTGAAGTCATCTGCCCTTCCATCCCTGG
CTATGGCTTCTCAGAGGCATCCTCCAAGAAGGGGTTCAACTCGGTGGCCACCGCCAGGATCTTTTACAAG
CTGATGCTGCGGCTGGGCTTCCAGGAATTCTACATTCAAGGAGGGGACTGGGGGTCCCTGATCTGCACTA
ATATGGCCCAGCTGGTGCCCAGCCACGTGAAAGGCCTGCACTTGAACATGGCTTTGGTTTTAAGCAACTT
CTCTACCCTGACCCTCCTCCTGGGACAGCGTTTCGGGAGGTTTCTTGGCCTCACTGAGAGGGATGTGGAG
CTGCTGTACCCCGTCAAGGAGAAGGTATTCTACAGCCTGATGAGGGAGAGCGGCTACATGCACATCCAGT
GCACCAAGCCTGACACCGTAGGCTCTGCTCTGAATGACTCTCCTGTGGGTCTGGCTGCCTATATTCTAGA
GAAGTTTTCCACCTGGACCAATACGGAATTCCGATACCTGGAGGATGGAGGCCTGGAAAGGAAGTTCTCC
CTGGACGACCTGCTGACCAACGTCATGCTCTACTGGACAACAGGCACCATCATCTCCTCCCAGCGCTTCT
ACAAGGAGAACCTGGGACAGGGCTGGATGACCCAGAAGCATGAGCGGATGAAGGTCTATGTGCCCACTGG
CTTCTCTGCCTTCCCTTTTGAGCTATTGCACACGCCTGAAAAGTGGGTGAGGTTCAAGTACCCAAAGCTC
ATCTCCTATTCCTACATGGTTCGTGGGGGCCACTTTGCGGCCTTTGAGGAGCCGGAGCTGCTCGCCCAGG
ACATCCGCAAGTTCCTGTCGGTGCTGGAGCGGCAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC227627 protein sequence
Red=Cloning site Green=Tags(s)

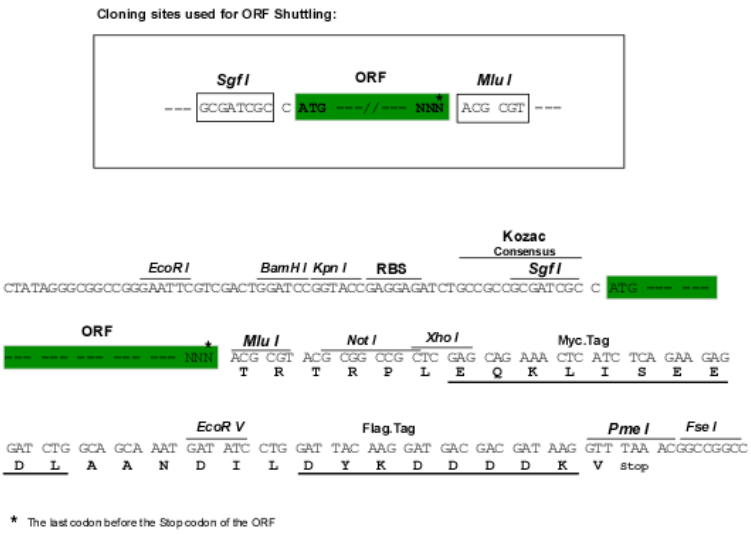
MWLEILLTSVLGFAIYWFISRDKEETLPLEDGWWGPGTRSAAREDDSIRPFKVETSDEEIHDLHQRIDKF
RFTPPLEDSCFHYGFNSNYLKKVISYWRNEFDWKKQVEILNRYPHFKTKIEGLDIHFIHVKPPQLPAGHT
PKPLLMVHGWPGSFYEFYKIIPLLTDPKNHGLSDEHVFEVICPSIPGYGFSEASSKKGFNSVATARIFYK
LMLRLGFQEFYIQGGDWGSLICTNMAQLVPSHVKGLHLNMALVLSNFSTLTLLLGQRFGRFLGLTERDVE
LLYPVKEKVFYSLMRESGYMHIQCTKPDTVGSALNDSPVGLAAYILEKFSTWTNTEFRYLEDGGLERKFS
LDDLLTNVMLYWTTGTIISSQRFYKENLGQGWMTQKHERMKVYVPTGFSAFPFELLHTPEKWVRFKYPKL
ISYSYMVRGGHFAAFEEPELLAQDIRKFLSVLERQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6083_h12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001136018

ORF Size: 1365 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_001136018.4

RefSeq Size: 1699 bp

RefSeq ORF: 1368 bp

Locus ID: 2052

UniProt ID: P07099

Cytogenetics: 1q42.12

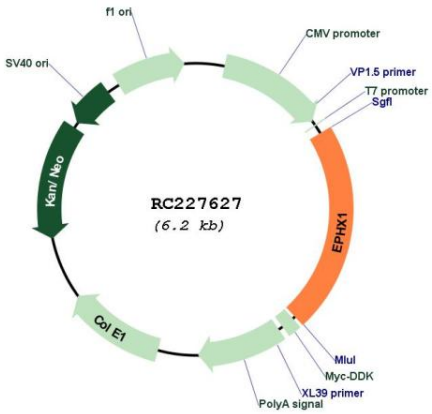
Protein Families: Druggable Genome, Protease

Protein Pathways: Metabolism of xenobiotics by cytochrome P450

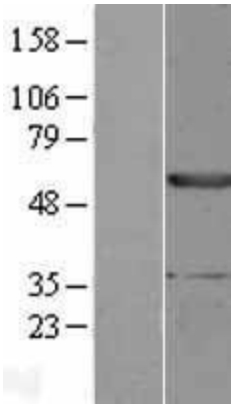
MW: 52.9 kDa

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]

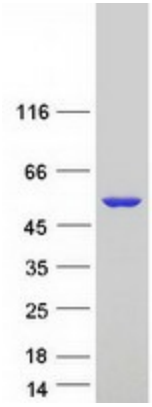
Product images:



Circular map for RC227627



Western blot validation of overexpression lysate (Cat# [LY427767]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC227627 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified EPHX1 protein (Cat# [TP327627]). The protein was produced from HEK293T cells transfected with EPHX1 cDNA clone (Cat# RC227627) using MegaTran 2.0 (Cat# [TT210002]).