

Product datasheet for **RG227627**

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:	TurboGFP
Symbol:	EPHX1
Synonyms:	EPHX; EPOX; HYL1; MEH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG227627 representing NM_001136018
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTGGCTAGAAATCCTCCTCACTTCAGTGTGGCTTTGCCATCTACTGGTTCATCTCCGGGACAAAG
 AGGAAACTTTGCCACTTGAAGATGGGTGGTGGGGCCAGGCACGAGGTCCGCAGCCAGGGAGGACGACAG
 CATCCGCCCTTTCAAGGTGGAACGTCAGATGAGGAGATCCACGACTTACACCAGAGGATCGATAAGTTC
 CGTTTACCCACCTTTGGAGGACAGCTGCTTCCACTATGGCTTCAACTCCAACCTACCTGAAGAAAGTCA
 TCTCTACTGGCGGAATGAATTTGACTGGAAGAAGCAGGTGGAGATTCTCAACAGATACCCTCACTTCAA
 GACTAAGATTGAAGGGCTGGACATCCACTTCATCCACGTGAAGCCCCCAGCTGCCCGCAGGCCATACC
 CCGAAGCCCTTGCTGATGGTGCACGGCTGGCCCGGCTTTTCTACGATTTTATAAGATCATCCACTCC
 TGACTGACCCCAAGAACCATGGCCTGAGCGATGAGCACGTTTTTGAAGTCATCTGCCCTTCCATCCCTGG
 CTATGGCTTCTCAGAGGCATCCTCAAGAAGGGTTCAACTCGGTGGCCACCGCCAGGATCTTTTACAAG
 CTGATGCTGCGGCTGGGCTTCCAGGAATTTACATTCAAGGAGGGGACTGGGGTCCCTGATCTGCACTA
 ATATGGCCAGCTGGTGGCCAGCCACGTGAAAGGCCTGCCTTGAACATGGCTTTGGTTTTAAGCAACTT
 CTCTACCTGACCCTCCTCCTGGGACAGCGTTTCGGGAGGTTTCTTGGCCTCACTGAGAGGGATGTGGAG
 CTGCTGTACCCCGTCAAGGAGAAGGTAATCTACAGCCTGATGAGGGAGAGCGGCTACATGCACATCCAGT
 GCACCAAGCCTGACACCGTAGGCTCTGCTCTGAATGACTCTCCTGTGGGTCTGGCTGCCTATATTCTAGA
 GAAGTTTTCCACCTGGACCAATACGGAATTCGATACCTGGAGGATGGAGGCCTGGAAAGGAAGTTCTCC
 CTGGACGACCTGCTGACCAACGTCATGCTCTACTGGACAACAGGCACCATCATCTCTCCAGCGCTTCT
 ACAAGGAGAACCCTGGGACAGGGCTGGATGACCCAGAAGCATGAGCGGATGAAGGTCTATGTGCCACTGG
 CTCTCTGCCTTCCCTTTTGGAGCTATTGCACAGCCTGAAAAGTGGGTGAGGTTCAAGTACCCAAAGCTC
 ATCTCCTATTCTACATGGTTCGTGGGGCCACTTTGCGGCTTTGAGGAGCCGGAGCTGCTCGCCAGG
 ACATCCGCAAGTTCCTGTCGGTGTGGAGCGGCAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG227627 representing NM_001136018
 Red=Cloning site Green=Tags(s)

MWLEILLTSVLGFAYWFISRDKETLPLEDGWWPGTRSAAREDDSIKPFKVVETSDEEIHDLHQRIDKF
 RFTPPLEDSCFHYGFNNSYLKVKVSYWRNEFDWKKQVEILNRYPHFKTKIEGLDIHF IHVKKPQLPAGHT
 PKPLLMVHGWPFSFYEFYKIIPLLDPKNHGLSDEHVFEVICPSIPGYGFSEASSKKGFNVSATARIFYK
 LMLRLGFQEFYIQGGDWGSLICTNMAQLVPSHVKGLHLNMLVLSNFSTLTLLLGQRFGRFLGLTERDVE
 LLYPVKEKVFYSLMRESGYMHIQCTKPDVTGVSALNDSPVGLAAYILEKFTWTNTEFRYLEDGGLERKFS
 LDDLNTNMLYTTGTIISSQRFYKENLGQWMTQKHERMKVYVPTGFSAFPPELLHTPEKWVRFKYPKL
 ISYSYMRGGHFAAFEEPELLAQDIRKFLSVLERQ

TRTRPLE - GFP Tag - V

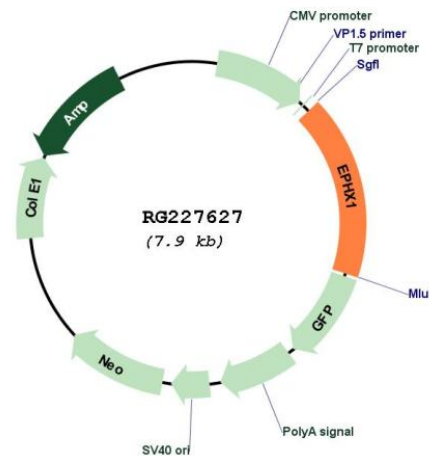
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



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:	<ol style="list-style-type: none">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:	1678 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
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]