OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC202489

EPHX2 (NM_001979) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EPHX2 (NM_001979) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EPHX2
Synonyms:	ABHD20; CEH; SEH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC202489 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACGCTGCGCGCGGCCGTCTTCGACCTTGACGGGGTGCTGGCGCTGCCAGCGGTGTTCGGCGTCCTCG
GCCGCACGGAGGAGGCCCTGGCGCTGCCCAGAGGACTTCTGAATGATGCTTTCCAGAAAGGGGGACCAGA
GGGTGCCACTACCCGGCTTATGAAAGGAGAGATCACACTTTCCCAGTGGATACCACTCATGGAAGAAAAC
TGCAGGAAGTGCTCCGAGACCGCTAAAGTCTGCCTCCCCAAGAATTTCTCCATAAAAGAAATCTTTGACA
AGGCGATTTCAGCCAGAAAGATCAACCGCCCCATGCTCCAGGCAGCTCTCATGCTCAGGAAGAAAGGATT
CACTACTGCCATCCTCACCAACACCTGGCTGGACGACCGTGCTGAGAGAGATGGCCTGGCCCAGCTGATG
TGTGAGCTGAAGATGCACTTTGACTTCCTGATAGAGTCGTGTCAGGTGGGAATGGTCAAACCTGAACCTC
AGATCTACAAGTTTCTGCTGGACACCCTGAAGGCCAGCCCCAGTGAGGTCGTTTTTTTGGATGACATCGG
GGCTAATCTGAAGCCAGCCCGTGACTTGGGAATGGTCACCATCCTGGTCCAGGACACTGACACGGCCCTG
AAAGAACTGGAGAAAGTGACCGGAATCCAGCTTCTCAATACCCCGGCCCCTCTGCCGACCTCTTGCAATC
CAAGTGACATGAGCCATGGGTACGTGACAGTAAAGCCCAGGGTCCGTCTGCATTTTGTGGAGCTGGGCTC
CGGCCCTGCTGTGTGCCTCTGCCATGGATTTCCCGAGAGTTGGTATTCTTGGAGGTACCAGATCCCTGCT
CTGGCCCAGGCAGGTTACCGGGTCCTAGCTATGGACATGAAAGGCTATGGAGAGTCATCTGCTCCTCCCG
AAATAGAAGAATATTGCATGGAAGTGTTATGTAAGGAGATGGTAACCTTCCTGGATAAACTGGGCCTCTC
TCAAGCAGTGTTCATTGGCCATGACTGGGGTGGCATGCTGGTGTGGTACATGGCTCTCTTCTACCCCGAG
AGAGTGAGGGCGGTGGCCAGTTTGAATACTCCCTTCATACCAGCAAATCCCAACATGTCCCCTTTGGAGA
GTATCAAAGCCAACCCAGTATTTGATTACCAGCTCTACTTCCAAGAACCAGGAGTGGCTGAGGCTGAACT
GGAACAGAACCTGAGTCGGACTTTCAAAAGCCTCTTCAGAGCAAGCGATGAGAGTGTTTTATCCATGCAT
AAAGTCTGTGAAGCGGGAGGACTTTTTGTAAATAGCCCAGAAGAGCCCAGCCTCAGCAGGATGGTCACTG
AGGAGGAAATCCAGTTCTATGTGCAGCAGTTCAAGAAGTCTGGTTTCAGAGGTCCTCTAAACTGGTACCG
AAACATGGAAAGGAACTGGAAGTGGGCTTGCAAAAGCTTGGGACGGAAGATCCTGATTCCGGCCCTGATG
GTCACGGCGGAGAAGGACTTCGTGCTCGTTCCTCAGATGTCCCAGCACATGGAGGACTGGATTCCCCACC
TGAAAAGGGGACACATTGAGGACTGTGGGCACTGGACACAGATGGACAAGCCAACCGAGGTGAATCAGAT
CCTCATTAAGTGGCTGGATTCTGATGCCCGGAACCCACCGGTGGTCTCAAAGATG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC202489 protein sequence
Red=Cloning site Green=Tags(s)

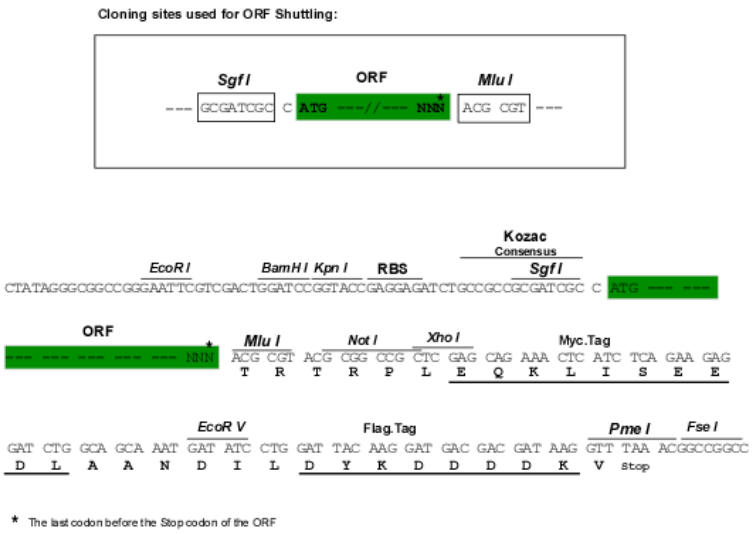
MTLRAAVFDLDGVLALPAVFGVLGRTEEALALPRGLLNDAFQKGGPEGATTRLMKGEITLSQWIPLMEEN
CRKCSETAKVCLPKNFSIKEIFDKAISARKINRPMLQAALMLRKKGFTTAILTNTWLDDRAERDGLAQLM
CELKMHFDFLIESCQVGMVKPEPQIYKFLLDTLKASPSEVVFLDDIGANLKPARDLGMVTILVQDTDTAL
KELEKVTGIQLLNTPAPLPTSCNPSDMSHGYVTVKPRVRLHFVELGSGPAVCLCHGFPESWYSWRYQIPA
LAQAGYRVLAMDMKGYGESSAPPEIEEYCMEVLCKEMVTFLDKLGLSQAVFIGHDWGGMLVWYMALFYPE
RVRAVASLNTPFIPANPNMSPLESIKANPVFDYQLYFQEPGVAEAELEQNLSRTFKSLFRASDESVLSMH
KVCEAGGLFVNSPEEPSLSRMVTEEEIQFYVQQFKKSGFRGPLNWYRNMERNWKWACKSLGRKILIPALM
VTAEKDFVLVPQMSQHMEDWIPHLKRGHIEDCGHWTQMDKPTEVNQILIKWLDSDARNPPVVSKM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

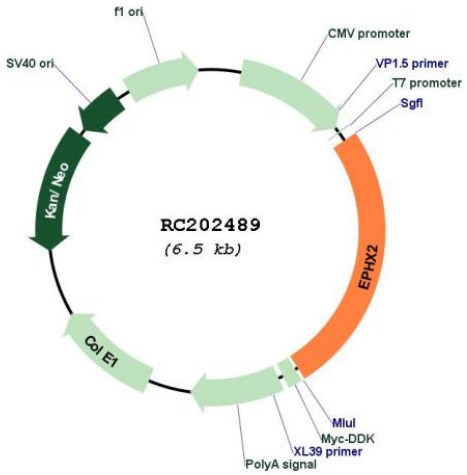
Chromatograms: https://cdn.origene.com/chromatograms/mk6217_b03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:

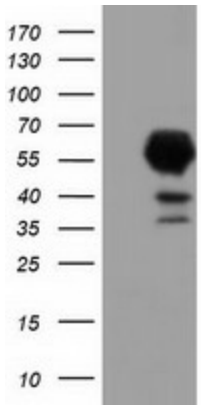


ACCN: NM_001979

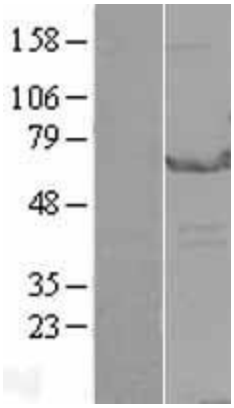
ORF Size: 1665 bp

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_001979.6
RefSeq Size:	2290 bp
RefSeq ORF:	1668 bp
Locus ID:	2053
UniProt ID:	P34913
Cytogenetics:	8p21.2-p21.1
Domains:	abhydrolase, Hydrolase
Protein Pathways:	Arachidonic acid metabolism, Metabolic pathways
MW:	62.6 kDa
Gene Summary:	This gene encodes a member of the epoxide hydrolase family. The protein, found in both the cytosol and peroxisomes, binds to specific epoxides and converts them to the corresponding dihydrodiols. Mutations in this gene have been associated with familial hypercholesterolemia. Alternatively spliced transcript variants have been described. [provided by RefSeq, Feb 2012]

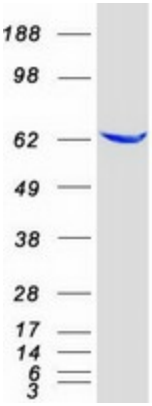
Product images:



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY EPHX2 (Cat# RC202489, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-EPHX2(Cat# [TA501626]). Positive lysates [LY419612] (100ug) and [LC419612] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY419612]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202489 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified EPHX2 protein (Cat# [TP302489]). The protein was produced from HEK293T cells transfected with EPHX2 cDNA clone (Cat# RC202489) using MegaTran 2.0 (Cat# [TT210002]).