

Product datasheet for **MR208783**

Ephx2 (NM_007940) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ephx2 (NM_007940) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ephx2
Synonyms:	CEH; Eph2; SEH; sEP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MR208783 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGCTGCGTGTAGCCGCGTTGACCTTGACGGAGTGTGGCCCTCCCCTCTATCGCCGGGGCTTTCC
 GCCGCAGCGAAGAGGCCCTGGCACTGCCTAGAGACTTCCTGCTTGGTGGTACCAGACGGAATCCAGAG
 GGGACCCACTGAGCAACTCATGAAAGGGAAGATCACATTTTCGACGTGGTACCCTCATGGATGAAAGC
 TACAGGAAGTCTCCAAAGCCTGTGGAGCAATCTACCTGAGAATTTCTCCATAAGTCAAATATTCAGCC
 AAGCTATGGCAGCAAGAAGCATCAACCGCCCCATGCTTCAGGCAGCCATTGCTCTCAAAAAGAAAGGATT
 CACAACATGCATTGTACCAACAACCTGGCTGGACGACGGAGACAAGAGAGACAGCCTGGCCAGATGATG
 TGTGAGCTGAGCCAACACTTTGACTTCCTGATAGAGTCTGTGAGTTGGGATGATCAAGCCTGAGCCTC
 AGATCTACAATTTTTACTGGATACCCTGAAGGCAAAACCAATGAGGTTGTTTTCTAGATGACTTTGG
 AAGTAATCTGAAGCCAGCCGCTGACATGGGGATGGTTACCATCCTGGTCCACAACACAGCCTCCGCTCTG
 AGAGAACTGGAGAAGGTACAGGGACACAGTTTCTGAGGCCCACTGCCAGTCCCATGCAATCCAAATG
 ACGTCAGCCATGGATATGTGACAGTGAAGCCAGGGATCCGCTGCATTTTGTGGAGATGGGCTCTGGCC
 TGCCCTATGCCTTTGCCATGGGTTTCTGAGAGCTGGTTTTCTGGAGGTACCAGATCCCTGCTCTGGCC
 CAGGCAGGCTTTCTGTCTGGCTATAGACATGAAAGGCTATGGAGACTCATCTTCTCTCTGAAATAG
 AAGAATATGCCATGGAATTGCTGTGTAAGGAGATGGTACATTCCTGGATAAGCTGGGAATCCCTCAAGC
 AGTGTTCATTGGCCATGACTGGGCTGGTGTGATGGTGTGGAACATGGCTCTTTTACCCTGAGAGAGTG
 AGGGCTGTGGCCAGTTTGAACACGCCGTTTATGCCACCAGATCCTGATGTGTCTCCCATGAAAGTTATCC
 GATCTATCCCAGTTTTCAATTATCAGCTGACTTTCAAGAACCAGGAGTGGCCGAGGCTGAAGTGGAGAA
 GAACATGAGTCGGACTTTCAAAAAGCTTCTCCGAGCCAGTATGAGACAGGTTTTCATCGCTGTGCATAAA
 GCCACTGAAATAGGGGAATCCTTGTGAATACTCCAGAAGATCCCAACCTCAGCAAAATTAATACTGAGG
 AAGAAATAGAGTTTTACATACAGCAGTTCAAGAAGACTGGCTTCAGAGGTCTCTGAACTGGTACCGGAA
 CACAGAAAGAACTGGAAGTGGAGCTGTAAGGGTTGGGACGAAAGATCTTGGTCCAGCCCTGATGGTC
 ACAGCTGAGAAGGACATTGTAAGTCCGCTCTGAAATGTCCAAGAACATGGAAGTGGATCCCTTTCTGTA
 AAAGGGGACACATTGAAGACTGTGGTCACTGGACACAGATAGAGAAACCAACTGAGGTGAACCAGATTCT
 CATCAAGTGGCTGCAGACTGAAGTCCAGAACCCATCAGTGACCTCAAGATT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR208783 protein sequence
 Red=Cloning site Green=Tags(s)

MALRVAAFDLDGVLALPSIAGAFRRSEEALALPRDFLLGAYQTEFPEGPTQLMKGKITFSQWVPLMDES
 YRKSSKACGANLPENFSISQIFSQAMAARSINRPMLQAAIALKKKGFTTCIVTNNWLDGDKRDSLQMM
 CELSQHFDFLIESCQVGMKPEPQIYNFLLDTLKAKPNEVVFLLDDFGSNLKPARDMGMVTILVHNTASAL
 RELEKVTGTQFPEAPLPVPCNPNDVSHGYVTVKPGIRLHFVEMGSGPALCLCHGFPESWFSWRYQIPALA
 QAGFRVLAIDMKGYDSSPPEIEEYAMELLCKEMVTFDLKLGIPQAVFIGHDWAGVMVWMMALFYPERV
 RAVASLNTPFMPDPDVSPMKVIRSIPVFNYQLYFQEPGVAEAELEKNMSRTFKSFFRASDETGFIAVHK
 ATEIGGILVNTPEPNLSKITTEEEIEFYIQQFKKTGFRGPLNWYRNTERNNKWSCKGLGRKILVPALMV
 TAEKDIVLRPEMSKNMEKWIPFLKRGHIEDCGHWTQIEKPTEVNQILIKWLQTEVQNPSTVSKI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_007940

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_007940.4](#)

RefSeq Size: 2062 bp

RefSeq ORF: 1665 bp

Locus ID: 13850

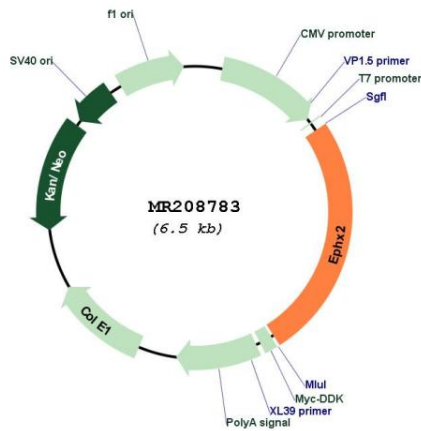
UniProt ID: [P34914](#)

Cytogenetics: 14 34.36 cM

MW: 62.5 kDa

Gene Summary: Bifunctional enzyme. The C-terminal domain has epoxide hydrolase activity and acts on epoxides (alkene oxides, oxiranes) and arene oxides. Plays a role in xenobiotic metabolism by degrading potentially toxic epoxides. Also determines steady-state levels of physiological mediators. The N-terminal domain has lipid phosphatase activity, with the highest activity towards threo-9,10-phosphonoxy-hydroxy-octadecanoic acid, followed by erythro-9,10-phosphonoxy-hydroxy-octadecanoic acid, 12-phosphonoxy-octadec-9Z-enoic acid and 12-phosphonoxy-octadec-9E-enoic acid.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR208783