

Product datasheet for MC222940

Ephb2 (NM_010142) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ephb2 (NM_010142) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Ephb2
Synonyms:	Cek5; Dr; Drt; Er; Erk; ETECK; Hek5; Nu; Nuk; Prk; Prkm5; Qek5; Sek; Sek3; Tyr; Tyro5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC222940 representing NM_010142 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCGTGCGCAGGCTGGGGCCGCGCTGCTGCTGCTGCCGCTGCTAGCCGCCGTGGAAGAAACCCTGA
TGGACTCTACGACAGCAACGGCTGAGCTGGGCTGGATGGTACATCCCCATCAGGGTGGGAAGAGGTGAG
CGGCTACGACGAGAACATGAACACTATCCGTACCTACCAGGTGTGCAATGTCTTTGAGTCAAGCCAGAAC
AACTGGCTGCGGACCAAATTCATCCGGCGCCGCGGCCACCGCATCCACGTGGAGATGAAGTTCTCGG
TGCCTGACTGCAGCAGCATTCCAGCGTGCCGGGCTCCTGCAAGGAGACCTTCAACCTCTACTACTATGA
GGCTGATTTTACTTAGCCACCAAAACCTTTCCCAACTGGATGGAGAATCCGTGGGTGAAGTGGACACC
ATCGCGGCCGATGAGAGCTTCTCTCAGGTGGACCTGGGTGGCCGCGTCATGAAAAACAACACTGAGGTGC
GAAGCTTCGGTCCCGTGTCCCGCAATGGTTTCTACCTGGCCTTCCAGGACTATGGCGGCTGTATGCCCT
CATTGCTGTGCGCGTCTTCTACCGGAAGTGCCCCGAATCATCCAGAATGGTGCCATCTTCCAGGAGACA
CTGTGGGGGCTGAGAGCACTTCGCTGGTGGCAGCTCGGGCAGCTGCATCGCCAATGCTGAAGAAGTGG
ATGTGCCCATCAAACCTACTGTAAACGGGGACGGCAATGGTGGTGCCCATAGGTGCGTGCATGTGCAA
GGCGGGCTTCGAGGCTGTGGAGAACGGCACCGTCTGCCGAGGTTGTCCATCAGGAACCTTCAAGGCCAAC
CAAGGGGACGAAGCCTGCACCCACTGTCCCATCAACAGCCGACACACCTCCGAGGTGCCACCAACTGTG
TATGCCGCAACGGCTACTACAGGGCCGACCTGGACCCCTTAGACATGCCTTGACAAACCATCCCCTCTGC
GCCCCAGGCTGTGATCTCCAGCGTCAACGAGACGTCCCTCATGCTAGAGTGGACCCACCCCGAGACTCG
GGGGTTCGCGAGGATCTTGTTTACAACATCATCTGCAAGAGCTGTGGCTCCGGCCGGGGCGCATGCACGC
GCTGCGGGGACAACGTGCAGTACGCGCCCCGACGCTGGGCTGACTGAGCCGCGCATCTACATCAGTGA
CCTGCTGGCACACGCGAGTACACCTTCGAGATCCAGGCCGTGAACGGTGTGACTGACCAGAGTCCCTTC
TCACCTCAGTTCGCTCTGTGAACATCACCAACCAAGCAGCACCATCGGCCGTGCCATCATGCACC
AGGTGAGCCGCACTGTGGACAGCATCACCTGTCTGGTCCCAGCCAGACCAGCCCAACGGTGTGATCCT
GGACTACGAGCTGCAGTACTATGAGAAGGAGCTCAGTGAGTACAACGCCACGGCCATAAAAAGCCCCACC



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AACACAGTCACTGTGCAGGGCCTCAAAGCCGGCGCCATCTATGTCTTCCAGGTGCGGGCACGCACCCTTG
CAGGCTATGGGCCTACAGTGGCAAGATGTACTTCAAACCATGACAGAAGCCGAGTACCAGACCAGCAT
CAAGGAAAAGCTACCCCTCATCGTTGGCTCCTCCGCCCGGGCTTAGTCTTCCATCGCTGTGGTCGTC
ATTGCCATCGTATGTAACAGACGGGGTGGTGGAGCGTCCGACTCAGAGTACACGGACAAGCTACAACACT
ACACCAGCGGACACATGACCCAGGCATGAAGATCTATATAGACCCTTTCACCTATGAAGATCCTAATGA
GGCAGTGCGGGAGTTTGCCAAGGAAATTGACATCCTGTGTCAAGATTGAGCAGGTGATCGGAGCAGGG
GAATTTGGTGAGGTCTGCAGTGGCCATTTGAAGCTGCCAGGCAAGAGAGAGATCTTTGTAGCCATCAAGA
CCCTCAAGTCAGGATACACGGAGAAACAGCGCCGGACTTCTGAGTGAGGCATCCATCATGGGCCAGTT
CGACCACCCCAATGTCATCCATCTGGAAGGGTGTGACCAAGAGCACACCTGTCATGATCATCACTGAA
TTCATGGAGAACGGATCTCTGGACTCCTTCCCGGCAAAACGATGGGCAGTTCACAGTCATCCAACCTGG
TGGGCATGCTGAGGGGATTGACGCCGGCATGAAGTACCTGGCGGACATGAACTACGTGCACCGTGACCT
TGCTGCTCGAAACATCCTCGTCAACAGCAACCTGGTGTGTAAGGTGTCTGATTTGGGCTCTCACGCTT
CTGGAGGATGACACGTCTGACCCACCTATACCAGCGCTCTGGGTGGGAAGATCCCCATCCGTTGGACGG
CACCGGAAGCCATCCAGTACCGGAAATTCACCTCGGCCAGTGATGTGTGGAGCTATGGCATCGTCATGTG
GGAGGTGATGCTCCTACGGGGAACGACCCTACTGGGACATGACCAATCAAGACGTAATCAAGCCATTGAA
CAGGACTACAGACTACCTCCGCCATGGACTGCCCTAGTCCCTGCACCAGCTCATGCTGGACTGTGGC
AGAAGGACCGCAACCACCGGCCAAGTTCGGCCAGATTGTCAACACGCTGGACAAGATGATCCGAAACCC
CAACAGCCTCAAAGCCATGGCACCCCTGTCTCTGGCATCAACCTGCCACTGCTGGACCGCACGATACCG
GACTACACCAGCTTAAACACGGTGGATGAGTGGCTAGAGGCCATCAAGATGGGCCAGTACAAGGAGAGCT
TTGCCAACGCCGGCTTACCTCTTTGACGTTGTATCTCAGATGATGATGGAGGACATTCCTCGGTTGG
GGTCACTCTAGCTGGCCACCAGAAAAAATCCTGAACAGTATCCAGGTGATGCGGGCCAGATGAACCAG
ATCCAGTCTGTAGAGGTTGA
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA
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Restriction Sites:

Sgfl-Mlul

ACCN:

NM_010142

Insert Size:

2961 bp

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](#)

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_010142.4](#), [NP_034272.1](#)

RefSeq Size: 4850 bp

RefSeq ORF: 2961 bp

Locus ID: 13844

UniProt ID: [P54763](#)

Cytogenetics: 4 69.0 cM

Gene Summary: This gene encodes a member of the Eph receptor family of receptor tyrosine kinase transmembrane glycoproteins. These receptors consist of an N-terminal glycosylated ligand-binding domain, a transmembrane region and an intracellular kinase domain. The encoded receptor preferentially binds membrane-bound ephrin-B ligands and is involved in nervous system and vascular development. This gene is used as a marker of intestinal stem cells. Homozygous knockout mice for this gene exhibit impaired axon guidance and vestibular function. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2015]

Transcript Variant: This variant (2) uses an alternate in-frame splice site in the 5' coding region, compared to variant 1. It encodes isoform 2, which is shorter by an amino acid, compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.