

Product datasheet for MC202000

Ephb3 (NM_010143) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ephb3 (NM_010143) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Ephb3
Synonyms:	AW456895; Cek10; Etk2; HEK2; MDK5; Sek4; Tyro6
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF: >BC053085 sequence for NM_010143
 AGCGGCGCAGCCAGATACCGGCTCCTACCCCGGACGGCGAGCGCACAAAGGATCCCGGGATCTGAGCTCGG
 CCTCAGTGGACTGTGCCCGAGAACCTGCGACCACCTGCGCCCTCCGCTTCCCGAGTCATTGGGCATCAA
 GCCACCCAGCGCCCGGATCCTCCTGGACCGGTCCGTCCAGATTCGCGGGAACGACCTGCCGGCATCT
 ACCCGGAGTCCCGGGTTGGGCGACACCTCGGTTACAGAGCAGCCCGTCTGCTTTGCTCCCCCTCCCTGAC
 GGGATCTCTTGGACTGTGCGCGAGCCTTCTTCTCGGGCGTCCCGAGCCCGCGGCGCGGCCCGGCTCG
 GCCCCCCAACCGAGCGCCCGGGCTATGGCCGGAGCCCGCCCGCCCGGGGCTTCTGCCGCTGCTCGCT
 CCGCTGCTGCTGCCGCTGCTGCTTCCCGCCGGTCTGGGCGCTGGAAGAGACTCTCATGGACACGAAAT
 GGGTGACGCTGAGCTGGCATGGACATCTCATCCAGAGAGTGGGTGGGAAGAAGTAAGCGGCTATGATGA
 AGCCATGAATCCTATCCGCACGTATCAGGTGTGTAATGTGCGTGAGTCGAGCCAGAACAAGTGGCTCGG
 ACGGGTTTCATCTGGCGCGGGAAGTCCAGCGCTCTACGTGGAGCTGAAGTTCACCGTAAGAGACTGTA
 ACAGCATTCCCAACATCCCTGGCTCCTGCAAGGAAACCTTCAACCTTTTCTACTACGAGGCTGATAGCGA
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 GAGAGCTTCTCGCGGCTCGATGCCGGGCGTGTCAACCAAGGTGCGCAGCTTCCGGCCGCTTTCCAAGG
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 GAAGTGTGCATCCACCACTGCAGGCTTCGCACTTTCGCGAGACCCTCACGGGGCTGAGCCACTTTCG
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 GGAGTCCAGTGCCGTGCCTGCTCCTGGGAGTTACAAAGCAAAGCAAGGAGAAGGGCCCTGCCCTCCC
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 CAGACTCAGACTCGGCCGACAGCGCCTGCACCACGGTGCATCTCCACCCGGGGTGTGATCTCCAATGT
 GAATGAGACCTCGCTAATCCTCGAATGGAGTGAGCCCGGGACCTTGGCGGACGAGATGACCTCCTTTAT
 AATGTTATCTGCAAGAAGTGCCGTGGGAGCTCTGGGGTGGGGTCCGGCAACCTGTTACGCTGCGATG
 ACAACGTAGATTTGTACCTCGGCAGCTGGGCCTGACAGAGCGCCGGTCCACATTAGCCACCTGTTGGC
 CCACACACGCTACACCTTTGAGGTGCAGGCTGTCAACGGTGTCTCAGGCAAAAGCCCTTTGCCACCCCGC
 TATGCAGCTGTAATATACCACCAACCAGGCTGCTCCATCAGAAGTGCCTACACTCCACCTGCACAGCA
 GCTCGGGGAGCAGCCTGACCCTGTCTGGCACCCCGAGAGCGGCTAATGGAGTCATCTTGGACTATGA



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GATGAAGTACTTTGAGAAGAGTAAAGGCATCGCCTCCACTGTAACCAGCCAGAAGAACTCCGTACAACCTG
 GACGGGCTGCAGCCTGATGCCCGCTACGTAGTTACAGTCCGGGCTCGCACAGTAGCGGGTTACGGACAGT
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 TCCTTTTACGGCTCAATGACGGACAGTTCACGGTCATCCAGCTTGTGGGCATGTTACGAGGCATTGCTG
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 CAGCAACTTGGTCTGCAAAGTCTCTGACTTTGGCCTCTCCCGCTTCTGGAGGATGACCCATCAGACCCC
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 ATGGACTGCCCCACCGCTGCACCAGCTCATGCTGGACTGTTGGGTGCCGGACCGGAACCTCAGGCCCA
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 GGTGACTGGTAGATGCCATCAAGATGGGGAGGTATAAAGAGAGCTTTGTGCGTGGTGGGTTTGCATCCT
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 GCCTGTGCTCCCTCCCAGAAAGTGTGCCCAAACCTTTCATATTGAAGATGGATTAGAAGAGGGGGTGA
 TGTCCCCTCCCAGATGCCTTGGGGCCAGGCCTGCCTGCTCTCCAGTGGGGAGTCTTCAAACTCAGAT
 TGGGCTGCGCTTTCAGTAATGGACGTCCTGGTAGGGTCAGGTGGGGATAAGCCTGGGTTCTTACGGCCCCA
 GCCCTGGCAGGGGTCTGACCCACCAGGTAAGCAGAGAGTACTCCCTCCCCAGGAAGTGGAGGAGGAGA
 CTCTGGGGATGGGGAGATATGGTCCCCATCCTGAAGCCAGCTGGTACCTCCAGTTTGCACAGGGACTTG
 ATGGGGGTGAGGGCCCTGCCTACCCTTGGTGTGTGCATAAAAGGGCAGGCAGGAGCAGGCTGAGAAGCA
 GCCTGTGCTCCCAGAGACTGACTCAGAGAGCCAGAGACTGTGTGTGTGTGTGTGTGTGTGTGTGTGT
 GTGTGTGTGTGTGTGAAAGACGGGGTGGGGGTATGTATGTGTGTGTGTGTGCACATGCTTGCCTGCAC
 AGAGAGCATGAGTGTGTACAAGCTTGGCCCTGTGCCCTGTAGTGGGGCCAGCTGGGCAGACAGCAAAATA
 AAGGCAATAAGATGAAAAAAAAAAAAAAAAAAAAA

- Restriction Sites:** Ascl-NotI
- ACCN:** NM_010143
- Insert Size:** 2982 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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: [BC053085](#), [AAH53085](#)

RefSeq Size: 4164 bp

RefSeq ORF: 2982 bp

Locus ID: 13845

UniProt ID: [P54754](#)

Cytogenetics: 16 B1

Gene Summary: Receptor tyrosine kinase which binds promiscuously transmembrane ephrin-B family ligands residing on adjacent cells, leading to contact-dependent bidirectional signaling into neighboring cells. The signaling pathway downstream of the receptor is referred to as forward signaling while the signaling pathway downstream of the ephrin ligand is referred to as reverse signaling. Generally has an overlapping and redundant function with EPHB2. Like EPHB2, functions in axon guidance during development regulating for instance the neurons forming the corpus callosum and the anterior commissure, 2 major interhemispheric connections between the temporal lobes of the cerebral cortex. In addition to its role in axon guidance plays also an important redundant role with other ephrin-B receptors in development and maturation of dendritic spines and the formation of excitatory synapses. Controls other aspects of development through regulation of cell migration and positioning. This includes angiogenesis, palate development and thymic epithelium development for instance. Forward and reverse signaling through the EFNB2/EPHB3 complex also regulate migration and adhesion of cells that tubularize the urethra and septate the cloaca. Finally, plays an important role in intestinal epithelium differentiation segregating progenitor from differentiated cells in the crypt.[UniProtKB/Swiss-Prot Function]