

Product datasheet for MR211390

Ephb4 (NM_010144) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ephb4 (NM_010144) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ephb4
Synonyms:	A1042935; Htk; MDK2; Myk1; Tyro11
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR211390 representing NM_010144 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGCTCCGAGCGCTGCTGTGCTGGGCTTCCCTCGCCACTGCTTTAGAAGAGACCCTGTTGAACACAA
AACTGGAAACGGCGGATCTGAAATGGGTGACTTACCCTCAGGCAGAGGGCCAGTGGGAGGAGCTAAGCGG
CCTGGATGAGGAACAGCACAGCGTCCGCACCTATGAGGTGTGCGACATGAAGCGTCCAGGGGCCAGGCT
CACTGGCTGCGCACTGGCTGGTCCCAAGGCGAGGTGCTGTCCACGTGTATGCCACGATACGCTTACCA
TGATGGAATGCCTGTCCCTGCCGAGGGCCAGTCCGCTCCTGCAAGGAGACATTCAGTGTCTTCTATTACGA
GAGCGAAGCTGATACGGCCACGGCCATACGCCCGCTGGATGGAGAACCCTACATCAAGTGGACACA
GTGGCCGCGAAGCATCTGACTCGGAAGCGCCCTGGAGCTGAAGCCACAGGAAAGTAAATCAAGACGC
TGCGCCTGGGTCTCTCAGCAAAGCTGGCTTCTACCTGGCTTCCAGGACCAAGGAGCCTGCATGGCTCT
GCTCTCCCTGCATCTCTTTACAAGAAGTGCTCCTGGCTGATCACGAACCTGACCTACTTCCCGGAGACG
GTGCTCGGGAGCTCGTGGTGCCGGTGGCAGGTAGCTGCGTGGCCAACCGGCTCCCTACCGCAACCCCA
GCCCCAGCCTCTACTGCCGGAAGATGGTCAATGGGCTGAGCAGCAGGTACGGGCTGCAGCTGCGCGCC
AGGGTACGAGGCTGCGGAAAGCAACAAAGTATGCAGAGCCTGTGGCCAGGAAACCTCAAGCCCCAATA
GGAGACGAGTCTGCCTGCCATGCCAGCCAACAGCCACTCGAATAACATTGGGTCTCCTGTCTGCCTGT
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AAGAAGCGTGGTTCACCATTTGAATGGTTCACCTGCGCCTGGAATGGAGTGCTCCCTTGAGTCCGGA
GGCCGAGAGGACCTCACTTATGCTGTACGCTGCCGAGAGTGCCGTCTGGGGTTCCTGCTTGCCTGTG
GGGGCGACATGACCTTCGACCCCGTCTCAGACCTGGTTGAGCCCTGGGTGGCAATCCGAGGGCTGCG
TCCTGATGTCACCTATACCTTTGAGGTTGCTGCTTTGAATGGTGTGTCTACCTTAGCCACTGGACCCT
CCTTTGAGCCTGTCAATGTCACCACTGACCGTGAGGTGCCTCCTGCAGTGTCTGACATCCGAGTGACTC
GGTCGTCACCCAGCAGCTTGATCCTGTCATGGGCTATCCCAGAGCACCCAGTGGGGCCGTGCTGGACTA
CGAGGTCAGATCATGAGAAGGGCGCAGAGGGCCCCAGCAGTGTTCGTTTCTGAAGACATCAGAAAAC



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CGAGCTGAGCTCCGGGGGCTGAAGCGGGGAGCCAGCTATCTGGTCCAGGTACGCGCACGGTCCGAGGCTG
 GCTACGGTCCCTTCGGCCAGGAGCATCACAGTCAGACTCAACTGGATGAGAGCGAGAGCTGGCGGGAGCA
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 CAAAGAGATCGATGTCTCTATGTCAAGATTGAAGAGTAATTGGTGCAGGTGAGTTCGGCGAGGTGTC
 CCGGCTCGGCTGAAGGCACGAGGAAAAGGAGAGCTGTGTGGCCATCAAGACTCTGAAGGGTGGTACA
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 GGCCCCGCTTTCCCAAGGTGGTACGCGCTCTGGACAAGATGATCCGGAATCCCGCTAGCCTCAAATCGT
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 TCTGTGGGCGAGTGGCTTCGAGCCATCAAGATGGGAAGATACGAGGAAAGTTTGCAGCGGCTGGATTCC
 GCTCCTTTGAGGTGGTCACTGAGTCTCTGCCGAGGACCTTCTCCGAATTGGAGTCACTCTGGCAGGACA
 CCAGAAGAAAATCTTGGCCAGTGTGCAGCATATGAAGTCCAAGTAAGCCAGGAGCCCTGGTGGGACA
 GGGGACCAGCCAGCAGTTC

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR211390 representing NM_010144
 Red=Cloning site Green=Tags(s)

MELRALLCWSLATALEETLLNKTLETADLKWVTPQAEQWHEELSGLDEEQHSVRTYEVCMDKRPGGQA
 HWLRTGWVPRRGAVHVYATIRFTMMECLSLPRASRSCKETFTVFYSEADTATAHTPAWMENPYIKVDT
 VAAEHLTRKRPGAATGKVNIKTLRLGPLSKAGFYLAQDQGACMALLSLHLFYKCSWLITNLTYFPET
 VPRELVPVAGSCVANAVPTANPSPLYCREDGQWAEQQVTGCSCAPGYEAAESNKVCRACGQGTGFKPQI
 GDESLPCPANSNIGSPVCLCRIGYYRARS DPRSSPCTTPPSAPRSVVHHLNGSTLRLEWSAPLESG
 GREDLTYAVRCRECRPGGSLPCGGDMTFDPGPRDLVEPWVAIRGLRPDVTYTFEVAALNGVSTLATGPP
 PFEPVNVTTDREVPVAVSDIRVTRSSPSSLILSWAIPRAPSGAVLDYEVKYHEKGAEGPSSVRFKLTSEN
 RAELRGLKRGASYLVQVRARSEAGYGFQEHHSQTQLDESESWREQLAL IAGTAVVGVVLV VVVIIAV
 LCLRKQSNGREVEYSDKHGOYLIGHGTVYIDPFTYEDPNEAVREFAKEIDVSYVKIEEVIGAGEFGEVC
 RGRLKAPGKKECVAIKTLKGGYTERQRREFLSEASIMGQFEHPNIIIRLEGVVTNSVPMILTEFMENGA
 LDSFLRLNDGQFTVIQLVGLRGIASGMRYLAEMSYVHRDLAARNILVNSNLVCKVSDFGLSRFLSENS
 DPTYTSSLGGKIPIRWTAPEAIAFRKFTSASDAWSYGIVMWEVMSFGERPYWMSNQDVINAIEQDYRLP
 PPPDCPTSLHQLMLDCWQKDRNARPRFPQVVSALDKMIRNPASLKIVARENGGASHPLLDQRQPHYSAFG
 SVGEWLRAIKMGRYEESFAAGFGSFEVVSQISAEDLLRIGVTLAGHQKILASVQHMSQAKPGAPGGT
 GGPAQQF

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9027_h02.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_010144

ORF Size: 2961 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_010144.6](#), [NP_034274.4](#)

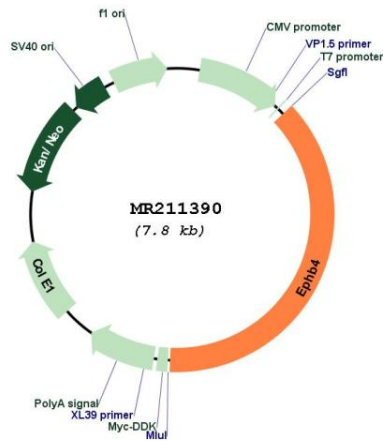
RefSeq Size: 4334 bp

RefSeq ORF: 2964 bp

Locus ID: 13846
UniProt ID: [P54761](#)
Cytogenetics: 5 G2
MW: 109.3 kDa

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. Together with its cognate ligand/functional ligand EFNB2 it is involved in the regulation of cell adhesion and migration, and plays a central role in heart morphogenesis, angiogenesis and blood vessel remodeling and permeability. EPHB4-mediated forward signaling controls cellular repulsion and segregation from EFNB2-expressing cells.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR211390