

Product datasheet for MR227085

Ephb4 (NM_001159571) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ephb4 (NM_001159571) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ephb4
Synonyms:	AI042935; Htk; MDK2; Myk1; Tyro11
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR227085 representing NM_001159571 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGCTCCGAGCGCTGCTGTGCTGGGCTTCCCTCGCCACTGCTTTAGAAGAGACCCTGTTGAACACAA
AACTGGAAACGGCGGATCTGAAATGGGTGACTTACCCTCAGGCAGAGGGCCAGTGGGAGGAGCTAAGCGG
CCTGGATGAGGAACAGCACAGCGTCCGCACCTATGAGGTGTGCGACATGAAGCGTCCAGGGGGCCAGGCT
CACTGGCTGCGCACTGGTGGTCCCAAGGCGAGGTGCTGTCCACGTGTATGCCACGATACGCTTACCA
TGATGGAATGCCTGTCCCTGCCGAGGGCCAGTCCGCTCCTGCAAGGAGACATTCAGTGTCTTATTACGA
GAGCGAAGCTGATACGGCCACGGCCCATACGCCCGCTGGATGGAGAACCCTACATCAAGTGGACACA
GTGGCCGCGAAGCATCTGACTCGGAAGCGCCCTGGAGCTGAAGCCACAGGAAAGTAAATCAAGACGC
TGCGCCTGGGTCCTCTCAGCAAAGCTGGCTTCTACCTGGCTTCCAGGACCAAGGAGCCTGCATGGCTCT
GCTCTCCCTGCATCTCTTTACAAGAAGTCTCCTGGCTGATCACGAACCTTGACCTACTTCCCGGAGACG
GTGCTCGGGAGCTCGTGGTGCCGGTGGCAGGTAGCTGCGTGGCCAACGCGGTCCCTACCGCCAACCCCA
GCCCCAGCCTCTACTGCCGGAAGATGGTCAATGGGCTGAGCAGCAGGTACGGGCTGCAGCTGCGCGCC
AGGGTACGAGGCTGCGGAAAGCAACAAAGTATGCAGAGCCTGTGGCCAGGGAACCTTCAAGCCCCAATA
GGAGACGAGTCTGCTGCCATGCCAGCCAACAGCCACTCGAATAACATTGGGCTCCTGTCTGCCTGT
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AAGAAGCGTGGTTCACCATTTGAATGGTTCACCTGCGCCTGGAATGGAGTGTCCCTTGGTCCGGA
GGCCGAGAGGACCTCACTTATGCTGTACGCTGCCGAGAGTGCCGTCTGGGGTTCCTGCTTGCCTGTG
GGGGCGACATGACCTTCGACCCCGTCTCGAGACCTGGTTGAGCCCTGGGTGGCAATCCGAGGGCTGCG
TCCTGATGTCACCTATACCTTTGAGGTTGCTGCTTTGAATGGTGTGTCTACCTTAGCCACTGGACCCT
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CTGCAGTGTCTGACATCCGAGTACTCGGTGTCACCCAGCAGCTTGATCCTGTCATGGGCTATCCCGAG
AGCACCCAGTGGGCGCTGCTGGACTACGAGGTCAAGTATCATGAGAAGGGCGCAGAGGGCCCCAGCAGT



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GTTCGTTTCCTGAAGACATCAGAAAACCGAGCTGAGCTCCGGGGGCTGAAGCGGGGAGCCAGCTATCTGG
 TCCAGGTACGCGCACGGTCCGAGGCTGGCTACGGTCCCTTCGGCCAGGAGCATCACAGTCAGACTCAACT
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 GTCCTGGTGGTCGTCATCATTGCAGTCTCTGCCTCAGGAAGCAGAGCAATGGGAGGGAAGTTGAGTACT
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 CCCTAATGAGGCAGTGAGGGAATTTGCCAAAGAGATCGATGTCTCCTATGTCAAGATTGAAGAGGTAATT
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 GGGCCAGTTTCAGCATCCCAACATCATCCGCTCGAGGGCGTGGTACCACAGTGTGCCGTTATGATC
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 TCCAGCTGGTGGGCATGCTGAGGGGCATCGCCTCGGGCATGCGGTACCTGGCTGAAATGAGCTATGTCCA
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 TCCAGATTCTGGAGGAGAACTCCTCTGATCCCACCTACACAAGTTCCTGGGAGGCAAGATTCCCATCC
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 GCCATTGAACAGGACTACCGGCTGCCTCCTCCTCCAGACTGCCACCTCCTCCACCAGCTCATGTGG
 ATTGTTGGCAGAAGGACCGGAATGCCCGGCCCGCTTCCCCAGGTGGTACGCGCTCTGGACAAGATGAT
 CCGGAATCCCCTAGCCTCAAAATCGTGGCCAGGGAGAATGGCGGGGCTCACATCCACTTTGGACCA
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 CCGAATTGGAGTCACTCTGGCAGGACACCAGAAGAAAATCTTGGCCAGTGTGCAGCATATGAAGTCCAA
 GCTAAGCCAGGAGCCCTGGTGGGACAGGGGACCAGCCAGCAGTTC

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGTTTAA

Protein Sequence:

>MR227085 representing NM_001159571
 Red=Cloning site Green=Tags(s)

MELRALLCWASLATALEETLLNKTLETADLKWVTYPQAEQWHEELSGLDEEQHSVRTYEVCDMKRPGGQA
 HWLRTGWVPRRGAVHVYATIRFTMMECLSLPRASRSCKETFTVFYSEADTATAHTPAWMENPYIKVDT
 VAAEHLTRKRPGAETGKVNIKTLRLGPLSKAGFYLAQDQGACMALLSLHLFYKCSWLITNLTYFPET
 VPRELVPVAGSCVANAVPTANPSPLYCREDDQWAEQQVTGCSCAPGYEAAESNKVCRACGQGTGFKPQI
 GDESLPCPANSNSNIGSPVCLCRIGYRARS DPRSSPCTTPPSAPRSVVHHLNGSTLRLEWSAPLESG
 GREDLTYAVRCRECRPGGSLPCGGDMTFDPGPRDLVEPWVAIRGLRPDVTYTFEVAALNGVSTLATGPP
 PFEPVNVTTDREGRIGFLSPAVPPAVSDIRVTRSSPSSLILSWAIPRAPSAGVLDEYVKYHEKGAEGPSS
 VRFLKTSENRAELRGLKRGASYLVQVRARSEAGYGFQGEHHSQTQLDESESWREQLAL IAGTAVGVVLL
 VLVVVIIAVLCLRKQSNGREVEYSKDHGQYLIGHGTKVYIDPFTYEDPNEAVREFAKEIDVSYVKIEEVI
 GAGEFGEVCRGLKAPGKKE SCVAIKTLKGGYTERQRREFLSEASIMGQFEHPNII RLEGVVTNSVPVMI
 LTFEMENGALDSFLRLNDGQFTVIQLVGMLRGIASGMRYLAEMSYVHRDLAARNILVNSNLVCKVSDFG
 SRFLEENSSDPTYTSSLGKIPIRWTAPEAIAFRKFTSASDAWSYGI VMWEVMSFGERPYWMSNQDVIN
 AIEQDYRLPPPCDPTSLHQLMLDCWQKDRNARPRFPQVVSALDKMIRNPASLKI VARENGGASHPLLDQ
 RQPHYSAFGSVGEWLR AIKMGRYEESFAAAGFGSFEVVSQISAEDLLRIGVTLAGHQKKILASVQHMKSQ
 AKPGAPGGTGGPAQQF

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9002_e11.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_001159571

ORF Size: 2988 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_001159571.1](#), [NP_001153043.1](#)

RefSeq Size: 4361 bp

RefSeq ORF: 2991 bp

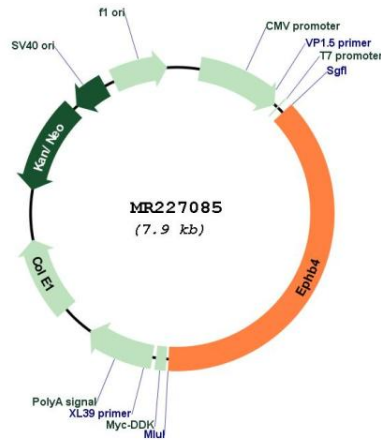
Locus ID: 13846

Cytogenetics: 5 G2

MW: 110.2 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 MR227085