

Product datasheet for MC220717

Epha7 (BC026153) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Epha7 (BC026153) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Epha7
Synonyms:	Ehk3, Mdk1, Cek11, Hek11
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>BC026153 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGTTGTTCAAACCTCGGTTCCCTTCGTGGATTATTTGTGTTACATCTGGCTGCTTGGCTTGCACACA
CGGGGAGGCGCAGGCTCGAAGGAAGTACTATTACTGGACTCGAAAGCACAACAACAGAATTGGAATG
GATTTCTCTCCACCCAGTGGTGGGAAGAAATTAGTGGTTTGGATGAGAACTACTCCGATAAGAACA
TACCAGGTGTGCCAGGTCATGGAGCCCAACCAGAACAACTGGCTGCGGACTAACTGGATTTCTAAAGGCA
ACGCACAAAGGATTTTTGTAGAATTGAAATTCACCTTGAGGGATTGTAATAGTCTTCCCGGAGTCCCTGGG
AACTTGCAAGGAAACGTTAATTTGACTATTATGAAACAGACTACGACACCCGGCAGGAATATACGAGAA
AACCTTTATGTTAAAATAGACACCATTGCTGCAGATGAAAGTTTACACAAAGGTGACCTTGGTGAAGAA
AGATGAAGCTGAACACTGAGGTGAGAGAGATTGGACCTTGTCCAAAAGGGATTCTATCTTGCCTTCA
GGATGTAGGGCTTGCATAGCATTGGTTTCTGTCAAAGTACTACAAGAAGTGTGGTCCATTGTTGAG
AACTTAGCTGTCTTCCAGATACAGTACTGGTTCGGAATTTTCGTCTTAGTCGAGGTCGGTGGACAT
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AGTACCCATTGGAAAATGCATCTGCAAAGCAGGCTATCAGCAAAAAGGGGACACTTGCGAACCCCTGTGGC
CGCAGGTTCTACAAATCTTCTCAGGATCTCCAGTGTCTCGTTGTCCAACCCACAGCTTCTCTGACC
GAGAAGGATCATCCAGGTGTGAATGTGAAGATGGTACTACAGAGCTCCTTCTGATCCACCATACGTTGC
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GGGAACAGGGAGAATGTGTGCCATGCGGAAGTAACATTGGATACATGCCCCAGCAGACAGGATTAGAGGA
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CGCAAGTGAGTGGAGTCATGAAGGAGCGAGTACTGCAGCGGAGTGTGCAGCTTTCCTGGCAGGAGCCGGA
GCATCCCAATGGAGTCATCACCGAATATGAAATCAAGTATTATGAGAAAGATCAACGGGAAAGGACGTAC
TCAACTCAAACCAAGTCCACCTCCGCTCCATTAATAATCTGAAACCGGGAACAGTGTATGTGTTTC



AGATCCGGGCGGTCACTGCTGCCGGTTATGAAACTACAGCCCTAGGCTTGATGTTGCCACACTTGAGGA
AGCTTCAGGTA AAAATGTTTGAAGCGACAGCAGTCTCCAGTGAACAGAATCCTGTCATCATAATTGCTGTA
GTGGCTGTAGCAGGGACCATCATCTTGGTGTTCATGGTGTTCGGCTTCATCATTGGAAGAAGGCACTGTG
GTTATAGCAAGGCTGACCAAGAAGGGGATGAAGAACTCTACTTTCATTGCACAAAACCTACATTGACCC
TGA AACCTATGAGGACCCAAATAGAGCTGTCCATCAATTCGCCAAGGAGCTAGATGCCTCCTGTATTA
ATTGAGCGTGTGATTGGTGCAGGAGAATTTGGAGAAGTTTGCAGTGGTCGTTTGA AACTCCGGGGAAGA
GAGATGTTGCAGTGGCCATAAAAACCTGAAAGTTGGTTACACAGAAAAACAAGGAGGGACTTTTTATG
CGAAGCAAGCATCATGGGGCAATTTGACCACCAAATGTCGTCCATTTGGAAGGGTTGTTACAAGAGGG
AAGCCTGTCATGATTGTGATAGAGTTCTGAGAGAATGGAGCCCTGGATGCATTTCTCAGGAAACACGATG
GGCAGTTTACAGTCATTAGTTGGTAGGAATGCTGAGAGGTATTGCCGCTGGGATGCGATACTTGGCTGA
TATGGGATACGTTACAGGGACCTTGCAGCAGCAACATCCTTGTCAACAGCAATCTTGTGTTGAAAGTG
TCAGATTTTGGCCTTTCCCGGTTATAGAGGATGATCCCGAAGCTGTCTACACCACGACTGGTGGAAAA
TTCCAGTAAGGTGGACTGCACCGAAGCCATTCAATACCGAAGTTCACCTCAGCCAGCGATGTGTGGAG
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GTCATTAAGCGATAGAAGAAGTTATCGTTTCCCGCGCCCATGGATTGCCAGCTGGTCTTACCAGC
TAATGCTGGATTGTTGGCAGAAAGATCGGGCGGAAAGGCCAAAGTTTGAAGCAGATAGTCGGAATTCTAGA
CAAATGATTCGAAACCAAGTAGTCTGAAAACACCCCTGGGAATTGTAGTAGCCCATAAGCCCTCTT
CTGGACCAGAGCACTCCTGACTTCACTGCCTTCTGTTTCAAGTGGAGAATGGTTGCAAGCTATTA AATGG
AAAGGTATAAGGACAACCTTACAGCAGCGGGTTACA AACTCACTCGAGTCAGTGGCCAGGATGACTATCGA
TGATGTGATGAGTTTAGGGATCACACTGGTTGGCCATCAAAGAAGATCATGAGCAGCATCCAGACTATG
CGGGCACAAATGTTGCATTTACACGGAACAGGCATCCAAGTGTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCTGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	Sgfl-Mlul
ACCN:	BC026153
Insert Size:	2985 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:	<ol style="list-style-type: none">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:	<u>BC026153</u> , <u>AAH26153</u>
RefSeq Size:	3554 bp
RefSeq ORF:	2984 bp
Locus ID:	13841

Cytogenetics: 4 12.42 cM

Gene Summary: Receptor tyrosine kinase which binds promiscuously GPI-anchored ephrin-A 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. Among GPI-anchored ephrin-A ligands, EFNA5 is a cognate/functional ligand for EPHA7 and their interaction regulates brain development modulating cell-cell adhesion and repulsion. Has a repellent activity on axons and is for instance involved in the guidance of corticothalamic axons and in the proper topographic mapping of retinal axons to the colliculus. May also regulate brain development through a caspase(CASP3)-dependent proapoptotic activity. Forward signaling may result in activation of components of the ERK signaling pathway including MAP2K1, MAP2K2, MAPK1 AND MAPK3 which are phosphorylated upon activation of EPHA7. Isoform 4 which lacks the kinase domain may regulate isoform 1 adhesive properties.[UniProtKB/Swiss-Prot Function]