

Product datasheet for MC223170

Epha8 (NM_007939) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Epha8 (NM_007939) Mouse Untagged Clone
Tag: Tag Free
Symbol: Epha8
Synonyms: AW047546; Eek; Hek3; mKIAA1459
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC223170 representing NM_007939
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCCCGGCCGGCCCGCTGTCCCCGCTCTCTGGGTCGTCACGGCCGGCGGGCCACCTGCG
 TGTCGGCGGGGGCGGGCAAGTGAACCTGTTGGATACATCAACCATCCACGGAGACTGGGCTGGCTCAC
 GTATCCCCTCATGGGTGGGACTCCATCAACGAGGTAGACGAGTCCTTCCGGCCATCCACAGTACCAA
 GTATGCAACGTATGAGCCCAACCAAGAACTGGCTGCGCACGAACTGGGTGCCCGGACGGCGCCA
 GGCGTGTCTACGCCGAGATCAAATTCACCTGCGTGACTGCAATAGCATCCCAGGGGTGTTAGGTACCTG
 CAAGGAGACCTTCAACCTTCACTACCTGGAGTCTGACCGCGACCTGGGGCCAGCACACAAGAGAGCCAG
 TTCTCAAGATTGACACCATCGCGGGGATGAGAGCTTACGGGGCGCAGACCTGGGTGTGCGGAGGCTCA
 AGCTGAACACGGAGGTGCGTGGCGTGGGCCGCTCAGCAAGCGCGGCTTCTACCTGGCCTTCCAGGACAT
 AGGTGCCTGCCTCGCCATCCTCTCACTCCGAATCTACTACAAGAAGTGGCCCGCCATGGTACGCAACCTG
 GCAGCCTTCTCGGAGGCGTTACTGGGGCCGACTCGTCTCGTGGTTGAGGTTTCGAGGCCAGTGTGTGC
 GGCACCTCGGAAGAGCGGACACACCAAGATGTACTGCACTGCTGAGGGCGAATGGCTGGTCCCATCGG
 CAAGTGGTGTGCACTGCTGGCTATGAGGAGCGCGGGATGCCTGCATGGCCTGTGAGCTGGGCTTCTAC
 AAGTCAGCCCCGGGGACAGCTGTGCGCCGATGCCACCCACAGCCACTCTGCCACCCTGCGGCC
 AGACCTGCCGTTGTGACCTCAGCTACTACCGCGGCTTGGACCCACCATCGGCAGCCTGCACCCGGCC
 ACCCTCAGCACCAGTGAACCTGATCTCCAGCGTAAATGGAACGTCTGTGACCCTCGAGTGGGCCCTCCT
 CTGGACCCAGGTGGTGCAGCGACATCACATAACGAGTGTGCCGCCGCTGCCCTGGGCCCTGAGCC
 ACTGTGAGGCTTGTGGAGTGAACCTCGTTCGTCGCCGAGCAGACAAGCCTGGCACAGGCCAGCCTGCT
 GGTGGCCAACCTGCTAGCCACATGAACCTACTCCTTCTGGATCGAGGCAGTCAACGGTGTCTCAACCTG
 AGCCCTGAGCCCCGAGCGCTGCTGTGGTCAACATCACCACGAACAGGCAGCCCGTCCCAGGTGGTGG
 TGATCCGGCAGGAGCGGGCTGGGCGAGCAGCGTGTCACTCCTGTGGCAGGAACAGAGCAGCCCAACGG
 CATCATCTGGAGTACGAGATCAAGTACTACGAGAAGGATAAGGAGATGCAAAGTACTCTACCCTCAAG
 GCTGTACCACCCGCGCCACCGTGTGAGGCTCAAACAGGCACTCGTACGTGTTCCAGGTCCGAGCCC



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GCACCTCAGCAGGCTGTGGCCGCTTCAGCCAGGCCATGGAGGTGGAGACCGGAAACCCAGGCCCCGCTA
CGACTCGGACCATCGTCTGGATCTGCCTGACTCATCACGGGCTGGTGGTCTCTTGTCTCTC
ATCTGCAAGAAGAGGCACTGTGGCTACAGCAAGGCGTTCCAGGACTCGGATGAAGAGAAGATGCATTACC
AGAACGGGCAGGCACCCACCTGTCTTTCCTTGAACCACCCCGGGGAAGTTCCAGAAACCCA
GTTCTCTCAGAGCCCCACCTATGAGGAACAGGTGGGCAGCCGGAGCTTTACCCGAGAGATCGAG
GCATCCAGGATCCACATTGAGAAGATCATAGGCTCGGGGAGTCAGGAGAAGTGTGCTATGGGAGGCTGC
AGGTGCCAGGACAGCGCATGTGCTGTGCCATCAAGGCTCTCAAAGCTGGCTACACGGAGAGACAGCG
ACAAGACTTCTTGAGCGAGGCGACCATCATGGCCAATTTGATCACCTAACATCATCCGCCTTGAGGGT
GTGGTCACCCGTGGTCGCCTGGCAATGATTGTGACGGAGTACATGGAAAATGGCTCTCTGGATGCCTTCC
TCAGGACCACGATGGGCAGTTCACCATCGTGCAGCTAGTGGCATGCTCAGAGGGGTGGGCCTGGCAT
GCGCTACCTCTCAGACTGGGCTACATTACCCTGACCTGGCTGCCCGCAATGCTCTGGTGGATGGCCGT
CTGGTGTGCAAAGTGTGACTTTGGGCTCTCAAGGGCTCTGGAGGATGACCCCGAAGCTGCCTACACCA
CTGCGGGAGGGAAGATCCCTATCCGATGGACAGCGCCGGAGGCCATTGCTTCCGCACGTTCTCCTCAGC
CAGTGATGTGTGGAGCTTTGGTGTGGTCATGTGGGAGGTTCTAGCCTATGGTGAACGACCCTACTGGAAC
ATGACCAACCAGGATGTCATCAGCTCTGTGGAGGAGGTTATAGGCTGCCAGCACCCATGGTTGCCAC
GTGCCCTACACCAGCTCATGCTGGACTGCTGGACAAGGACCGTCCCGAGCGGCCCTCGTTCGCTCATGT
CGTGAGCGTTCTGGATGCCCTGGTCCACAGTCCTGAGAGCCTCAGGGCCACAGCCACAGTCAGCAGGTGC
CCACCCCTGCCTTCGCCAGGAGCTGCTTTGACCTCCGAGCAGGCGGAAGTGGGAACGGGGACCTCACAG
TGGGGGACTGGCTGGACTCCATCCGAATGGGGCGCTACCGGGACCACTTCGCGGCTGGCGGGTACTCCTC
CCTCGGCATGGTCTTCGGATGAACGCCAGGATGTGCGCGCCCTCGGCATCACTCTCATGGGTACCAG
AAGAAGATACTTGAAGCATCCAGACCATGAGGGCCAGCTGAGCAGCACCCAGGGACCCCGCCGGCACC
TCTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_007939

Insert Size: 3015 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: [NM_007939.2](#), [NP_031965.2](#)

RefSeq Size: 4732 bp

RefSeq ORF: 3015 bp

Locus ID: 13842

UniProt ID: [O09127](#)

Cytogenetics: 4 D3

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. The GPI-anchored ephrin-A EFNA2, EFNA3, and EFNA5 are able to activate EPHA8 through phosphorylation. With EFNA5 may regulate integrin-mediated cell adhesion and migration on fibronectin substrate but also neurite outgrowth. During development of the nervous system plays also a role in axon guidance. Downstream effectors of the EPHA8 signaling pathway include FYN which promotes cell adhesion upon activation by EPHA8 and the MAP kinases in the stimulation of neurite outgrowth.[UniProtKB/Swiss-Prot Function]