

## Product datasheet for RC220352

### EPHA8 (NM\_020526) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** EPHA8 (NM\_020526) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** EPHA8  
**Synonyms:** EEK; EK3; HEK3  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC220352 representing NM\_020526  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCCCGCCCGGGCCGCTGCCCCCTGCGCTCTGGGTCTGTCACGGCCGGCGGGCGGCCACCT  
GCGTGTCCGGCGCGCGCGGAAGTGAATTTGCTGGACACGTCGACCATCCACGGGGACTGGGGTGGCT  
CACGTATCCGGCTCATGGGTGGGACTCCATCAACGAGGTGGACGAGTCTTCCAGCCATCCACACGTAC  
CAGGTTTGAACGTCATGAGCCCAACAGAACAACCTGGCTGCGCAGGAGCTGGTCCCCGAGACGGCG  
CCCGCGCGTCTATGCTGAGATCAAGTTTACCCTGCGCGACTGCAACAGCATGCCTGGTGTGCTGGGCAC  
CTGCAAGGAGACCTTCAACCTCTACTACCTGGAGTCGGACCGCGACCTGGGGGCCAGCACACAAGAAAGC  
CAGTTCCTCAAAATCGACACCATTGCGGCCGACGAGAGCTTACAGGTGCCGACCTTGGTGTGCGGCGTC  
TCAAGTCAACACGGAGGTGCGCAGTGTGGTCCCCTCAGCAAGCGCGGCTTCTACCTGGCCTTCCAGGA  
CATAGGTGCCTGCCTGGCCATCCTCTCTCCGCATCTACTATAAGAAGTGCCCTGCCATGGTGCGAAT  
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GCCGCTGCGAGGCATGTGGGAGCGGCACCCGCTTTGTGCCCCAGCAGACAAGCCTGGTGCAGGCCAGCCT  
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CGGCATCATCCTGGAGTATGAGATCAAGTACTACGAGAAGGACAAGGAGATGCAGAGCTACTCCACCCTC



AAGGCCGTCACCACCAGAGCCACCGTCTCCGGCCTCAAGCCGGGCACCCGCTACGTGTTCCAGGTCCGAG  
 CCCGCACCTCAGCAGGCTGTGGCCGCTTACGCCAGGCCATGGAGGTGGAGACCGGAAACCCCGGCCCG  
 CTATGACACCAGGACCATTGTCTGGATCTGCCTGACGCTCATCACGGGCTGGTGGTGTCTTGCTCCTG  
 CTCATCTGCAAGAAGAGGCACTGTGGCTACAGCAAGGCCCTCCAGGACTCGGACGAGGAGAAGATGCACT  
 ATCAGAATGGACAGGCACCCCACTGTCTTCTGCCTGTCATACCCCCGGGAAAGTCCCAGAGCC  
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 GAGGCCCTAGGATCCACATCGAGAAAATCATCGGCTCTGGAGACTCGGGGAAGTCTGCTACGGGAGGC  
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 TGCCACCCCTGCCTTCGTCCGGAGCTGCTTTGACCTCCGAGGGGGCAGCGGTGGCGGTGGGGGCTCA  
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ACGCGTACGCGGGCCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC220352 representing NM\_020526  
 Red=Cloning site Green=Tags(s)

MAPARGRLPPALWVVTAAAAAATCVSAARGEVNLLDTSTIHGDWGWLTYPAHGWSINEVDESFPQIHTY  
 QVCNVMSFNQNNWLRTSWVPRDGARRVYAEIKFTLRDCNSMPGVLTGCKETFNLYYLESDDLGAQTQES  
 QFLKIDTIAADESFTGADLGVRRLLKLNTEVRSVGPLSKRGFYLAQDQIGACLAISLRIYYKCPAMVRN  
 LAAFSEAVTGADSSSLVEVRGQCVRHSEERDTPKMYCSAEGEWLVPIGKCVCSAGYEERRDACVACELGF  
 YKSAPGDQLCARCPPHSHAAPAAQACHCDLSYYRAALDPPSSACTRPPSAPVNLISSVNGTSVTLEWAP  
 PLDPGGRSDITYNAVCRRCPWALSRCEACGSGTRFVPOQTSLVQASLLVANLLAHMNYSFWIEAVNGVSD  
 LSPEPRRAAVVNITTNQAAPSQVVVIRQERAGQTSVSLWQEPQNGIILEYEIKYYEKDKEMQSYSTL  
 KAVTTRATVSGLKPGRYVVFQVRARTSAGCGRFSQAMEVETGKPRPRYDTRTIWVICLTLITGLVLLLLL  
 LICKKRHCYKAFQDSDEEKMHYQNGQAPPPVFLPLHPPGKLEPQFYAEPHTYEEPGRAGRSFTREI  
 EASRIHIEKIIIGSGDSGEVYGRRLRVPQQRDVPVAIKALKAGYTERQRDFLSEASIMGQFDHPNIRLE  
 GVVTRGRLAMIVTEYMENGLDFTLRTHDQFTIMQLVGLRGVAGMRYLSDLGYVHRDLAARNVLVDS  
 NLVCKVSDFLSRVLEDDPDAAYTTTGGKIPIRWTAPEIAFRTFSSASDVWSFGVVMWEVLAYGERPYW  
 NMTNRDVISSVEEGYRLPAPMGCPHALHQLMLDCWHKDRAQRPRFSQIVSVLDALIRSPESLRATATVSR  
 CPPPAFVRSCFDLRGGSGGGGLTVGDWLDLIRMGYRDHFAAGGYSSLGMVLRMNAQDVRALGITLMGH  
 QKKILGSIQTMRAQLTSTQPPRHL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8010\\_c08.zip](https://cdn.origene.com/chromatograms/mk8010_c08.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_020526

**ORF Size:** 3015 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\\_020526.5](#)

**RefSeq Size:** 4996 bp

**RefSeq ORF:** 3018 bp

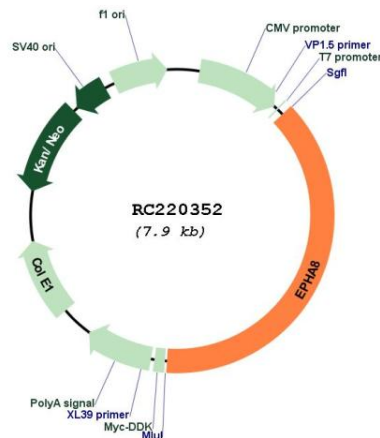
**Locus ID:** 2046

**UniProt ID:** [P29322](#)  
**Cytogenetics:** 1p36.12  
**Domains:** pkinase, EPH\_lbd, TyrKc, SAM, S\_TKc, FN3  
**Protein Families:** Druggable Genome, Protein Kinase, Transmembrane  
**Protein Pathways:** Axon guidance

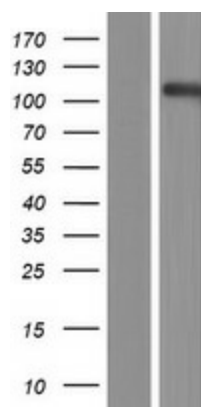
**MW:** 108.1 kDa

**Gene Summary:** This gene encodes a member of the ephrin receptor subfamily of the protein-tyrosine kinase family. EPH and EPH-related receptors have been implicated in mediating developmental events, particularly in the nervous system. Receptors in the EPH subfamily typically have a single kinase domain and an extracellular region containing a Cys-rich domain and 2 fibronectin type III repeats. The ephrin receptors are divided into 2 groups based on the similarity of their extracellular domain sequences and their affinities for binding ephrin-A and ephrin-B ligands. The protein encoded by this gene functions as a receptor for ephrin A2, A3 and A5 and plays a role in short-range contact-mediated axonal guidance during development of the mammalian nervous system. [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RC220352



Western blot validation of overexpression lysate (Cat# [LY412430]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220352 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).