

## Product datasheet for **RC600046**

### EPHA8 (NM\_001006943) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	EPHA8 (NM_001006943) Human Tagged ORF Clone
Tag:	DDK-His
Symbol:	EPHA8
Synonyms:	EEK; EK3; HEK3
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5-DDK-His (PS100068)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RC600046 representing leader sequence plus the extracellular domain region of NM\_001006943

Red=Cloning site Blue=ORF Green=Tags(s)

GTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCTGGTACCGAGGAGATCCGCCCGCCG  
CGATCGCC

ATGGCCCCCGCCCGGGCCGCTGCCCCCTGCGCTCTGGGTCTGACGGCCGCGGGCGGGCCACCT  
CGGTGTCCGCGCGCGCGGCAAGTGAATTTGCTGGACACGTCGACCATCCACGGGACTGGGGCTGGCT  
CACGTATCCGGCTCATGGGTGGGACTCCATCAACGAGGTGGACGAGTCTTCCAGCCATCCACACGTAC  
CAGGTTTGCAACGTCATGAGCCCCAACAGAACAAGTGGCTGCGCAGGACTGGTCCCCCGAGACGGCG  
CCCGGCGCTCTATGCTGAGATCAAGTTTACCCTGCGCGACTGCAACAGCATGCCTGGTGTGCTGGGCAC  
CTGCAAGGAGACCTTCAACCTCTACTACCTGGAGTCGGACCGGACCTGGGGCCAGCACACAAGAAAGC  
CAGTTCCTCAAAATCGACACCATTGCGGCCGACGAGAGCTTACAGGTGCCGACCTTGGTGTGCGGCGTC  
TCAAGCTCAACACGGAGGTGCGCAGTGTGGTCCCTCAGCAAGCGGGCTTCTACTGGCCTTCCAGGA  
CATAGGTGCCTGCCTGGCCATCCTCTCTCCGCATCTACTATAAGAAAGTCCCTGCCATGGTGCCTCAAT  
CTGGCTGCCTTCTCGGAGGACGTGACGGGGCCGACTCGTCTCACTGGTGGAGGTGAGGGGCCAGTGCG  
TGCGGCACTCAGAGGAGCGGGACACACCAAGATGACTGCAGCGCGGAGGGCGAGTGGCTCGTGCCAT  
CGGCAATGCGTGTGAGTGCAGTGCAGGACGCGGGATGCCTGTGTGGCTGTGAGCTGGGCTTC  
TACAAGTCAGCCCTGGGACAGCTGTGTGCCGCTGCCCTCCCACAGCCACTCCGCAGCTCCAGCCG  
CCCAAGCTGCCACTGTGACCTCAGCTACTACCGTGCAGCCCTGGACCCGCGTCTCAGCTGCACCCG  
GCCACCTCGGCACCAGTGAACCTGATCTCCAGTGTGAATGGGACATCAGTACTGGAGTGGGCCCT  
CCCTGGACCCAGGTGGCCGACGTGACATCACCTACAATGCCGTGTGCCGCGCTGCCCTGGGCACTGA  
GCCGCTGCGAGGATGTGGGAGCGGCACCCGCTTTGTGCCAGCAGACAAGCCTGGTGCAGGCCAGCCT  
GCTGGTGGCAACCTGCTGGCCACATGAACTACTCCTTCTGGATCGAGGCGCTCAATGGCGTGTCCGAC  
CTGAGCCCCGAGCCCCGCGGGCCGCTGTGGTCAACATCACACGAACCAGGCAGGTAGGCGGAGAACT  
CCGTCCCAGCGTCTGGTCCCCAGCTTCCCCTGCCTCAGACCCATCCAGGGATCAGAGCTCTGCCGG  
GGACGTGTGCGGCTTAGGCAAGTGCCTCTGCGCCTGCGCTCTCACCAGGACCCAGAGCTGGAG  
GCTCTTCATTGCCTT

ACGCGTTCAGGCGACTACAAGGATGACGACGATAAGGGATCTCATCATCACCATCACCATTAAATGAGATC  
TGGTACCGATATCAAGCTTGTGACTCTAGA

**Protein Sequence:**

>RC600046 representing signal peptide plus the extracellular domain region of NM\_001006943

Red=Cloning sites Green= DDK and 6XHIS Tags

MAPARGRLPPALWVVTAAAAAATCVSAARGEVNLDTSTIHGDWGLTYPAHGWSINEVDESFPQIHTY  
QVCNVMSPNQNNWLRTSWVPRDGARRVYAEIKFTLRDCNSMPGVLTCKETFNLYYLES DRDLGASTQES  
QFLKIDTIAADESFTGADLGVRRLKLNTEVRSVGPLSKRGFYLAQDQIGACLAILSLRIYKPCPAMVRN  
LAAFSEAVTGADSSSLVEVRGQCVRHSEERDTPKMYCSAEGEWLVPIGKCVCSAGYEERRDACVACELGF  
YKSAPGDQLCARPPHSHAAPAAQACHCDLSYYRAALDPPSSACTRPPSAPVNLISSVNGTSVTLEWAP  
PLDPPGGRSDITYNAVCRRCPPWALSRCACGSGTRFVPOQTSLVQASLLVANLLAHMNYSFWIEAVNGVSD  
LSPEPRRAAVVNITTNQAGRRRNSVPQRPASPASPASDPSRDQSSAGDVLWAFRQVPLWPCAPHQDPELE  
ALHCL

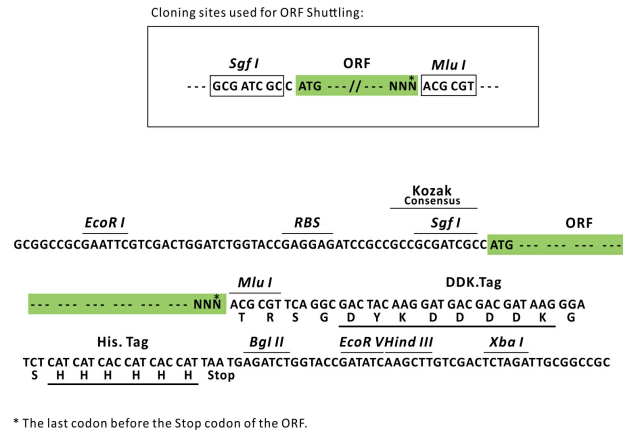
TRSGTRSGDYKDDDDKGSHHHHHH

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8117\\_f11.zip](https://cdn.origene.com/chromatograms/mk8117_f11.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001006943

**ORF Size:** 1485 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 extra cellular domain of the protein 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\\_001006943.1](#), [NP\\_001006944.1](#)

**RefSeq Size:** 1866 bp

**RefSeq ORF:** 1488 bp

**Locus ID:** 2046

**UniProt ID:** [P29322](#)

<b>Cytogenetics:</b>	1p36.12
<b>Protein Families:</b>	Druggable Genome, Protein Kinase, Transmembrane
<b>Protein Pathways:</b>	Axon guidance
<b>MW:</b>	53.9 kDa
<b>Gene Summary:</b>	<p>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]</p>